EPSON®

C82378✽
EpsonNet 10/100 Base Tx Ext. Print Server

Administrator's Manual

DECLARATION of CONFORMITY

According to 47CFR, Part 2 and 15 for Class B Personal Computers and Peripherals; and/or CPU Boards and Power Supplies used with Class B Personal Computers:

We: EPSON AMERICA, INC.

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Declare under sole responsibility that the product identified herein, complies with 47CFR Part 2 and 15 of the FCC rules as a Class B digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on a statistical basis as required by 47CFR §2.909 Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Trade Name: EPSON

Type of Product: Print Server

Model: EU-44

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Introduction

The EpsonNet 10/100 Base Tx Ext. Print Server is a combination of hardware and software that lets you connect an EPSON printer equipped with a parallel interface directly to your network. Just attach the network adapter to your printer's parallel interface connector, and connect it anywhere on your network.

Note:
❏ *This manual is written for network administrators. Many of the steps included here require detailed network knowledge and administrator rights. The term network administrator refers to the person responsible for maintaining the client network.*

❏ *The term "network adapter" refers to the EpsonNet 10/100 Base Tx Ext. Print Server in this manual.*

The network adapter automatically selects the correct interface when it connects to the network. In addition, it supports IEEE 802.2, IEEE 802.3, Ethernet II, and Ethernet SNAP network protocols.

Because the network adapter supports multiple protocols and automatically detects the protocols on your network, you can print from Microsoft® Windows®, Apple® Macintosh®, UNIX, and IBM® OS/2 applications.

Use EpsonNet WinAssist or MacAssist, the configuration software provided with your network adapter, to quickly and easily configure the printer to use protocols such as IPX/SPX™, TCP/IP, EtherTalk®, NetBEUI, and NetBIOS over TCP/IP.

Note:
The configuration software configures the network adapter to work only with the protocols that exist on your network. This does not imply that you can use all of the above mentioned protocols with your network or operating system. The protocols that the network adapter can use may vary depending on the operating systems used and network configuration.

Cautions and Notes

Cautions must be observed to avoid damage to your equipment.

Notes contain important information and useful tips on the operation of the network adapter.

Enclosed Items

Your interface package includes:

❏ C82378✽, the network adapter (the utility EpsonNet WebAssist is pre-installed)

❏ The Software CD-ROM including:
-- EpsonNet WinAssist
-- EpsonNet MacAssist
-- EpsonNet WebAssist
-- EpsonNet Direct Print
-- EpsonNet Internet Print
-- EpsonNet WebManager
-- EPSON Status Monitor 2
-- Stylus Photo 750 (printer driver for Macintosh)
-- Stylus Photo 1200 (printer driver for Macintosh)
-- Administrator's Manual (PDF manual)
-- Acrobat Reader

Note:
When using Stylus Photo 750 and Stylus Photo 1200 printers with the network adapter from Macintosh, use the printer drivers included on this CD-ROM.

❏ Online Guide Supplement Sheet

❏ EpsonNet WebManager Installation Guide

❏ An AC adapter and cable

Caution:
❏ *Only use the AC adapter shipped with this package to supply power to the network adapter.*

❏ *Your interface package requires a network connection for the network adapter and a host EPSON printer. Use a Category-5 shielded twisted-pair cable to connect the network adapter to a network.*

About Functions of Network Adapter

❏ By installing the network adapter into your printer's parallel interface, network printing becomes available with low cost.

❏ The network adapter automatically selects either 10BaseT or 100BaseTX when it is connected to a network. It supports 100 Base full duplex, 100 Base half duplex, and 10 Base half duplex.

❏ Because the network adapter supports Printer MIB proxy response, SNMP settings such as SNMP community, IP trap, and IPX trap settings are available with EpsonNet WinAssist and WebAssist.

EPSON Printers that Support the Network Adapter

The network adapter can be installed in the following EPSON ink jet printers (as of May 2000).

❏ Stylus COLOR 760/860/1160

❏ Stylus Photo 750/870/1200/1270

Operating Environment

Supported operating systems and network protocols

See the following chapters for more information.

❏ NetWare 3.1x / 4.1x / 5   ▶ Chapter 4
Bindery mode for NetWare 3.1x
NDS and Bindery Emulation mode for
NetWare 4.1x and IntranetWare
NDS, Queue-based print system, and NDPS for NetWare 5

❏ Windows 98/95   ▶ Chapter 5
TCP/IP (Printing via EpsonNet Direct Print)
NetBEUI
IPP

❏ Windows 2000/NT 4.0/3.51   ▶ Chapter 6
TCP/IP (LPR)
NetBEUI
IPP (except Windows NT 3.51)

❏ Macintosh   ▶ Chapter 7
System 7.5.x, Mac OS 7.6.x, 8.x, 9.x
AppleTalk protocol

❏ OS/2Warp 3 / 4 (OS/2Warp Connect
and OS/2Warp Server)   ▶ Chapter 8
TCP/IP (lprportd)
NetBEUI

❏ UNIX   ▶ Chapter 9
Sun OS 4.1.4 or later: SPARC
SunSoft Solaris 2.4 or later: SPARC and x86
SCO UNIX 4.2 or later
SCO UnixWare 2.01 or later
HP/UX 9.05 or later
IBM AIX 3.2.5 or later and 4.1.3 or later

lpr, ftp: Filtering operation (TCP/IP)

About the Software

❏ **EpsonNet WinAssist**
The configuration software for administrator for Windows that allows you to configure the network adapter for TCP/IP, NetWare, NetBEUI, AppleTalk, IPP and SNMP. By using EpsonNet WinAssist Easy Setup, you can easily configure the network adapter for TCP/IP and NetBEUI.

❏ **EpsonNet MacAssist**
The configuration software for administrator for Macintosh that allows you to configure the network adapter for TCP/IP and AppleTalk.

❏ **EpsonNet WebAssist**
From EpsonNet WinAssist or MacAssist, or by typing the IP address of the network adapter for the URL in your browser, you can start EpsonNet WebAssist. This is the web-based software that allows you to configure the network adapter for TCP/IP, NetWare, NetBEUI, AppleTalk, IPP, and SNMP.

❏ **EpsonNet WebManager**
Web-based software that helps network administrators to easily control network devices.

❏ **EpsonNet Direct Print**
Utility software that enables TCP/IP printing for Windows 98/95/2000/NT 4.0.

❏ **EpsonNet Internet Print**
Utility software that offers printing across the Internet using Internet Printing Protocol (IPP) for Windows 98/95/NT 4.0.

❏ **EPSON Status Monitor 2**
Utility software that comes with your printer driver gives you information about your printer's current status.

❏ **Printer Status Page**
A set of customized web pages for Windows 2000 Internet Printing. It comes with your Windows 2000's printer driver.

Configuring the Network Adapter

To configure the network adapter, you must complete the following steps. See the noted documentation for more detailed information.

1. Install the network adapter in your printer. See Chapter 1.

2. Install EpsonNet WinAssist or MacAssist. See the supplemental sheet shipped with the CD-ROM. Or you can use the EpsonNet Easy Setup to configure the network adapter without installing EpsonNet WinAssist. See Chapter 2.

3. Set the IP address for the network adapter. See Chapter 3.

4. Configure the network adapter using EpsonNet WinAssist, MacAssist, or WebAssist and set up the printer. See the appropriate chapter for your network environment.

5. Use EpsonNet Direct Print to print from TCP/IP. See Chapter 11.

6. Use EPSON Status Monitor 2 to monitor printer status. See Chapter 12.

7. Use EpsonNet Internet Print to print using the Internet Printing Protocol (IPP). See Chapter 13.

8. Use Printer Status Page to monitor printer status through the Internet. See Chapter 14.

Chapter 1

Getting Started

This chapter explains how to install and use the network adapter.

Network Adapter Operation

The lights and the status sheet can provide you with important information about the operation and configuration of the network adapter.

RJ-45 connector   DC-IN connector

STATUS
DATA

DCIN 5V

Status sheet button   Status lights
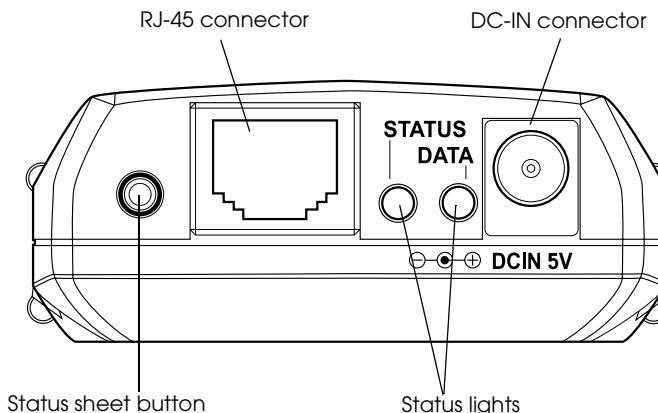
Status lights

The network adapter has two status lights that indicate the current operating status of the network adapter when you first turn on the printer, during normal operation, and when errors occur. The Status light has two-colors, red and green, and when both colors are on produces orange. The Data light is a green light.

The status lights indicate the following:

Status light	Data light	Status
Green	On	10M link
Green	Flashing	10M receiving packets
Orange	On	100M link
Orange	Flashing	100M receiving packets
Red	On	Initializing
Red Flashing	On	Error status
Red and Green flashing alternately		Firmware update mode

Status sheet button

The first time you use the network adapter after installing or reinstalling it, turn on the printer while holding down the status sheet button and keep to hold down it about twenty seconds to initialize the network adapter. The length of time necessary to hold down the status sheet button varies depending on the printer model. See your user's guide for more information.

Before you start configuring the network adapter, be sure to press and hold the status sheet button on the network adapter to print a status sheet. A status sheet shows important information such as the current configuration, the serial number, and the MAC address. You will need this information to configure the network adapter.

You cannot print a status sheet if the printer has started printing, if it is off-line, or if it is not ready to print.

Note:
If the printer does not print a status sheet, make sure that the printer is on-line and no print jobs are being processed, then wait a minute. If it still does not print a status sheet, turn the printer off, wait until the status lights go out, and turn it on again.

> *Caution:*
> *After turning off the printer, wait until the status lights go out before turning it back on; otherwise the network adapter may not work correctly.*

Network connectors

The network adapter can detect which kind of cable is attached. You do not need to make any hardware or software settings to specify the cable type.

RJ-45 connector:
Connect a Category-5 shielded twisted pair cable to the RJ-45 connector on the network adapter. You can use this cable for both 10BaseT and 100BaseTX.

DC-IN connector:
Plug the AC adapter into the network adapter's DC-IN connector.

> *Caution:*
> ❏ *You must use a Category-5 shielded twisted-pair cable to connect the network adapter to prevent malfunctions.*
>
> ❏ *You must use the AC adapter shipped with this package.*

Connecting to the Network

Follow the instructions below to install the network adapter in your printer.

> **Caution:**
> ❏ *Do not place anything on top of the network adapter.*
>
> ❏ *Leave adequate room around the network adapter for easy operation.*

1. Make sure that the printer is turned off.

2. Plug the network adapter into the printer's parallel interface connector. Be sure to squeeze the wire clips together until they lock in place on either side of the connector.

3. Connect the network cable to the RJ-45 connector on the network adapter and other end to the network.

    > **Caution:**
    > *You must use a Category-5 shielded twisted-pair cable to connect the network adapter to prevent malfunctions.*

    > **Note:**
    > ❏ *The network adapter is set to the default IP address "192.168.192.168". This private IP address may cause a conflict on your network. To prevent this, you must confirm that the same IP address does not already exist on the network before connecting the network adapter to the network. If it does, turn off the device which has the same IP address, then change the default IP address of the network adapter. See Chapter 3 for instructions on setting the IP address.*
    >
    > ❏ *Do not connect or disconnect the network cable when the printer is on.*
    >
    > ❏ *Be sure to use a HUB to connect the network adapter to the network.*

4. Plug the AC adapter into the network adapter's DC-IN connector. Be sure to use the AC adapter shipped with this package.

> ⚡ *Warning:*
> *When you install or uninstall the network adapter, you must turn off the printer and unplug the AC adapter from the wall outlet to prevent electric shock.*

5. Plug the power cord into a properly grounded wall outlet.

6. Turn on the printer.

7. The first time you use the network adapter after installing or reinstalling it, turn on the printer while holding down the status sheet button for twenty seconds to initialize the network adapter.

> *Note:*
> *After installing the network adapter, some printers take more than 30 seconds to initialize the network adapter.*

8. Press and hold down the status sheet button to print a status sheet.

If a status sheet prints, the network adapter has been installed correctly.

> ❗ *Caution:*
> *After turning off the printer, wait until the status lights go out before turning it back on or before removing the network adapter from the printer; otherwise the network adapter may not work correctly.*

Initializing the Network Adapter

You must initialize the network adapter in the following cases:

❏ The first time you turn on the printer after installing the network adapter

❏ When the utility does not recognize the network adapter because of settings conflicts in the network adapter

❏ If you forget the configuration utility's password

Follow these steps to initialize the network adapter.

1. Make sure that the printer with the network adapter is turned off.

2. While holding down the status sheet button, turn the printer on.

3. Hold down the status sheet button for about twenty seconds until the red Status light and green Data light turn on. These lights indicate that the network adapter is being initialized.

4. After initialization is complete, press the status sheet button to print a status sheet. Check the information on the status sheet.

Chapter 2

Easy Setup Configuration

You can use EpsonNet WinAssist Easy Setup to configure the printer for use on a network using either the TCP/IP protocol or the NetBEUI protocol.

If EpsonNet WinAssist is installed on your computer, you can access EpsonNet WinAssist Easy Setup from the Start menu. If EpsonNet WinAssist is not installed on your computer, you can access EpsonNet WinAssist Easy Setup directly from the CD-ROM. Refer to the appropriate section below.

Note:
❏ *Make sure that the TCP/IP protocol is installed in your computer. To print using NetBEUI, make sure that the NetBEUI protocol is installed on your computer. See Appendix A, "Installing Protocols," to install the necessary protocols.*

❏ *Before proceeding to the appropriate section below, you must set the IP address for the network adapter or log on to the NetWare server.*

Starting Easy Setup from the CD-ROM

Follow the steps below to start EpsonNet WinAssist Easy Setup
from the CD-ROM.

1. Insert the software CD in the CD-ROM drive.

2. The EPSON Installation Program starts automatically.

   If the EPSON Installation Program does not start
   automatically, click Start and then Run. Type D:\EPSETUP
   and click OK. (Substitute the appropriate letter for your CD-
   ROM drive if necessary.)

3. Double-click Run EpsonNet WinAssist Easy Setup.

   The EpsonNet WinAssist Easy Setup dialog box appears.
   Click Next.

4. Read the Usage Agreement and click Next.

5. Select the target printer and click Next.
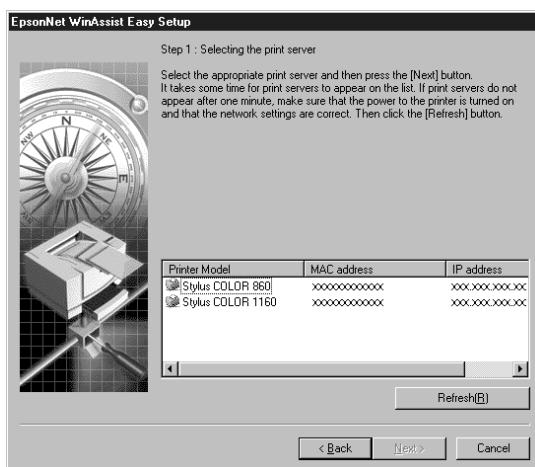
6. Specify whether or not to use the Microsoft network sharing service and click Next. If you select No, proceed to step 9.
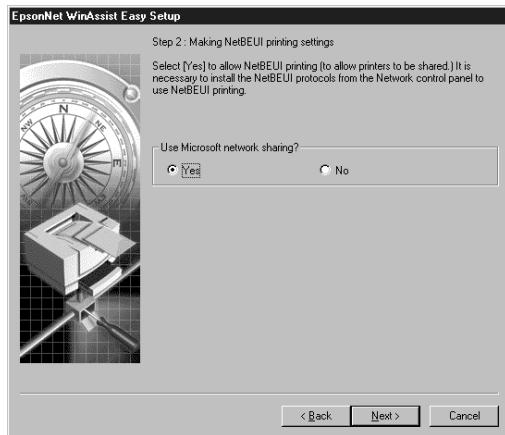
7. Confirm the host name (NetBIOS name). Change it if necessary. Click Next to proceed.
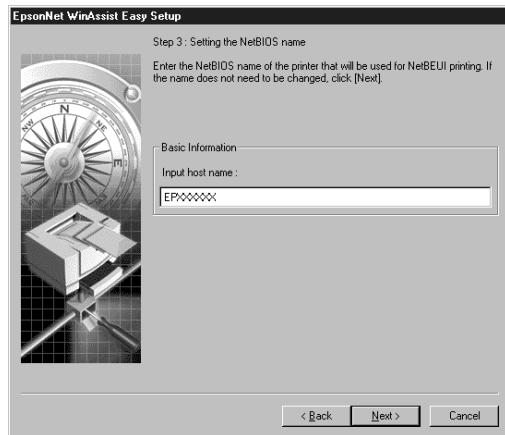
8. Specify whether or not to use TCP/IP printing and click Next. If you select No, proceed to step 10.
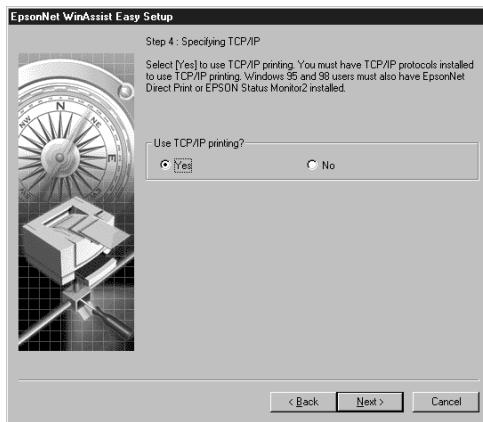
9. Select Auto or Manual. If you select Auto, DHCP becomes available. If you want to set the IP address manually, select Manual and enter the IP address. Click Next.
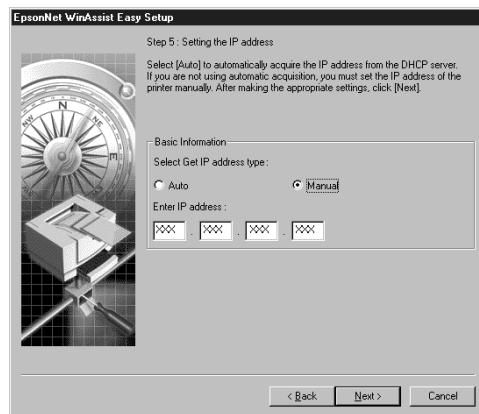
Note:
To use the DHCP server, it must be installed on your computer and configured correctly. See your operating system's online help for detailed instructions.

10. Confirm your settings and click Send.

If you have set a password for the network adapter, the Password dialog box appears. Enter your password (up to 20 characters) and click OK to save your settings. Follow the on-screen instructions.

> *Caution:*
> *It takes two or three minutes to send new settings to the network adapter. Do not turn off your printer until an on-screen message appears instructing you to do so.*

Starting Easy Setup from the Start Menu

If you have already installed EpsonNet WinAssist on your computer, you can start EpsonNet WinAssist Easy Setup from the Start menu.

Click Start, point to Programs and then to EpsonNet WinAssist, then click EpsonNet EasySetup. The EpsonNet WinAssist Easy Setup dialog box appears. Click Next, then go to step 4 in "Starting Easy Setup from the CD-ROM" on page 2-2 for detailed instructions on using EpsonNet WinAssist Easy Setup.

Chapter 3

Setting the IP Address

To use the network adapter with TCP/IP, you need to assign it an IP address using EpsonNet WinAssist, EpsonNet MacAssist, or the arp/ping command.

The IP address should be set in the following cases:

❏ When configuring the network adapter using EpsonNet WebAssist (the utility that is pre-installed in the network adapter)

❏ When remote (LPR on IP) printing from NetWare 5

❏ When TCP/IP (via EpsonNet Direct Print) printing from Windows 98/95/2000/NT 4.0

❏ When TCP/IP (LPR port) printing from Windows 2000/NT 4.0/NT 3.51

❏ When TCP/IP (lpr port) printing from OS/2 Warp or UNIX

❏ When Internet Printing using EpsonNet Internet Print from Windows 98/95/NT 4.0

❏ When Internet Printing from Windows 2000

❏ When managing printers using EpsonNet WebManager via TCP/IP

Setting the IP Address Using EpsonNet WinAssist/ MacAssist

This section explains how to set the IP address for the network adapter using EpsonNet WinAssist or MacAssist.

Note:
- ❏ *Be sure that the TCP/IP protocols are installed in your computer. See "Installing TCP/IP Protocols on Your PC" on page A-1 for instructions.*

- ❏ *The network adapter is set to the default IP address "192.168.192.168". This private IP address may cause conflicts on your network. To prevent this, you must confirm that the same IP address does not exist on the network before connecting the network adapter to the network. If it does, turn off the device which has the same IP address, then change the default IP address of the network adapter. Be sure to ask your network administrator for the IP address, subnet mask, and default gateway.*

- ❏ *To set the IP address for OS/2 and UNIX, use the arp and ping commands. For more information, see "Setting the IP Address Using arp/ping Commands" on page 3-6.*

Follow the steps below to set the IP address. The sample screens are from the Windows 95 operating system using EpsonNet WinAssist. Other systems differ in appearance, however the instructions are the same, except as noted.

1. Confirm that the necessary protocols are installed in the computer.

   If you are using Windows 98/95/2000/NT, TCP/IP must be installed. If you are using Macintosh, AppleTalk must be installed.

2. Turn on the printer with the network adapter.

3. Start EpsonNet WinAssist or MacAssist.

   Windows 98/95/2000/NT 4.0: Click Start, point to Programs, then EpsonNet WinAssist, then click EpsonNet WinAssist.

   Windows NT 3.51: Double-click the EpsonNet WinAssist icon in the EpsonNet WinAssist group.

   Macintosh: Double-click the EpsonNet MacAssist icon.

4. Select the printer whose IP address you want to set, then click Configuration or double-click the printer.
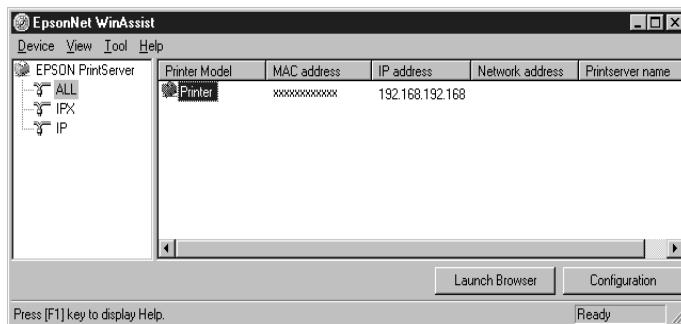
Note:
❏ *If you have connected more than one printer to the network, you can distinguish between the printers by the MAC address on a status sheet.*

❏ *You can search printers in other segments by setting the* Search Options *in the Tool menu in EpsonNet WinAssist. See "Optional settings" on page 10-4 for more information.*

5. Click the TCP/IP tab to display the TCP/IP menu.

   Note:
   The network administrator must confirm any changes made to the
   IP address settings.
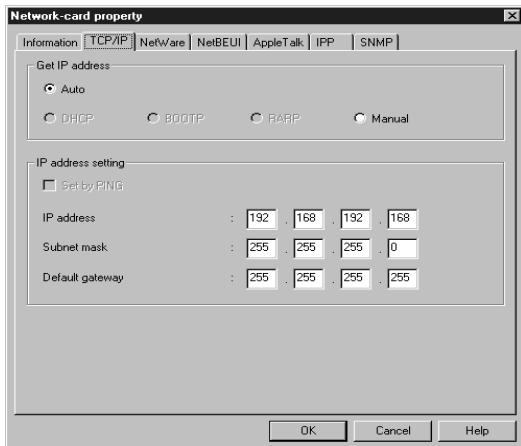
6. Select the "Get IP address" method, either Auto or Manual.
   When you select Auto, DHCP becomes available. When you
   want to set the IP address manually, select Manual.

   Note:
   ❏ *The default is* Auto. *When* Auto *is selected, DHCP is*
      available. To use the DHCP server, it must be installed in your
      computer and must be correctly configured. See your operating
      system's online help for detailed instructions.

   ❏ *If there are no DHCP servers on your system or on your*
      network, the network adapter uses "192.168.192.168" as the
      default IP address.

   ❏ *Whenever the printer is turned on, you need to change the*
      printer port setting if Auto *is selected for* Get IP address.
      For TCP/IP printing, we recommend selecting Manual *and*
      setting the IP address manually.

7. When you select Manual, assign the IP address, the subnet mask, and the default gateway. Be sure to give an IP address which does not conflict with any other device on the network.

    Note:
    ❏   *The default value for the IP address, subnet mask, and default gateway are 192.168.192.168, 255.255.255.0, and 255.255.255.255 respectively.*

    ❏   *If there is a server or a router which functions as a gateway, enter the IP address of the server or router for the gateway address. If there is no gateway, leave the default values.*

    ❏   *The* Set by PING *check box is not available. To set the IP address using arp and ping commands, leave the IP address as default.*

8. After making the settings, click OK. The Password dialog box appears.

9. Enter your password (up to 20 characters) and click OK to save the settings. If you are entering a password for the first time, click Change and set the password. For more information about passwords, see "About passwords" on page 10-7 for EpsonNet WinAssist or "About passwords" on page 10-19 for EpsonNet MacAssist.

    Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu (for WinAssist), or by quitting MacAssist and then restarting it (for MacAssist).

    ! **Caution:**
    Since it takes 2 or 3 minutes to send new settings to the network adapter, you must wait until the on-screen message appears to turn off your printer.

10. Print a status sheet to confirm the new IP address.

Setting the IP Address Using arp/ping Commands

If you are using UNIX or OS/2, you need to use the arp command to set the IP address of the network adapter, and the ping command to check that you have set it correctly. You can also use these commands with Windows 98/ 95/2000/NT, if you have correctly installed TCP/IP networking on these systems.

To set the IP address by using arp and ping commands, the IP address of the network adapter must have the default IP address (192.168.192.168) and the network adapter must be in the same segment as the host computer.

Before you start, you will need the following information:

❏ A valid IP address for the network adapter. Ask your system administrator for an IP address which will not cause conflicts with any other device on the network. If you are the system administrator, choose an address within your subnet which will not conflict with any other device.

❏ The MAC (Ethernet hardware) address of the network adapter. This is the hardware serial number of the network adapter, which cannot be changed. You can check the MAC address on a status sheet.

Checking the LAN

First, you need to check that the network adapter can be reached from the host.

1. Set the default gateway to the host on which you will be setting up the network adapter.

   If there is a server or router which acts as a gateway, enter the address of the server or router. If there is no gateway, enter the IP address of your computer as a gateway address.

2. The default IP address of the network adapter is "192.168.192.168". Check that the network adapter is reachable by "pinging" it from the command line:
    ping 192.168.192.168

3. If the network adapter is reachable, you should see results something like the following (the exact form of the message depends on your operating system, and the time may vary):
    64 bytes from 192:168:192:168:icmp_seq=0. Time=34.ms

4. If the network adapter is unreachable, you may see something like:
    PING 192:168:192:168:56 data bytes

    until you press Ctrl-C, when you may see something like:
    192:168:192:168 PING Statistics
    3 packets transmitted, 0 packets received,
    100% packet loss

    Again, the exact wording of the message you see may differ from this, depending on your operating system. If you cannot "ping" the network adapter, check the following:

    ❏ The address is correct in the ping command.

    ❏ The Ethernet connection to the network adapter and to the host has been made correctly, and all hubs, routers, etc. are switched on.

    ❏ The network adapter is operating normally (red light off, green or orange light on).

Setting and checking the new IP address

To set the new IP address which you have obtained from your system administrator, use the arp command, with the -s flag (create ARP entry).

Note:
In the following, we will assume that the MAC address of your network adapter is 00:00:48:93:00:00 (hexadecimal), and that the IP address which you will be assigning is 192.168.100.201 (decimal). Substitute your values for these addresses when you type in the commands.

1. From the command line, type:
    Example: arp -s 192.168.100.201 00-00-48-93-00-00

2. You can now check the new IP address, by "pinging" it:
    Example: ping 192.168.100.201

3. The network adapter should now respond to the ping. If it does not, you may have incorrectly typed the MAC address or the IP address in the arp -s command. Double-check and try again. If all else fails, re-initialize the network adapter and try again.

4. Print a status sheet to check whether the new IP address has been assigned for the network adapter.

    Note:
    When you set the IP address of the network adapter in this way, you cannot change the subnet mask or gateway setting of the network adapter. You must use the EpsonNet WinAssist in Windows (98, 95, 2000, or NT), or EpsonNet MacAssist in Macintosh to change these parameters. You can also use EpsonNet WebAssist to change these parameters.

Changing the IP Address Using EpsonNet WebAssist

After you have configured the network adapter for TCP/IP using EpsonNet WinAssist, MacAssist, or the arp/ping commands, you can make changes to the IP address or other settings using EpsonNet WebAssist (a utility that runs on your browser).

Note:
❏ *A web browser must be installed in your computer.*

❏ *TCP/IP must be correctly set for the computer and network adapter.*

❏ *Do not operate EpsonNet WinAssist/MacAssist and EpsonNet WebAssist for the printer at the same time.*

❏ *There are some restrictions on the characters you can use depending on your browser. For details, see your browser or OS documentation.*

Follow the steps below to change the IP address using EpsonNet WebAssist.

1. Turn on the printer with the network adapter.

2. Run EpsonNet WebAssist by either way described below.

   ❏ Run EpsonNet WinAssist or EpsonNet MacAssist. Click the printer you want to configure from the list and click Launch Browser.

   ❏ Open your browser, and type in the IP address of the network adapter directly. Do not run EpsonNet WinAssist or MacAssist.

   http://*the IP address of the network adapter***/**

   Example: **http://192.168.100.201/**

3. Click TCP/IP under Network on the Configuration menu to view the TCP/IP setting screen.

Note:
The network administrator must confirm any changes made to the IP address settings.
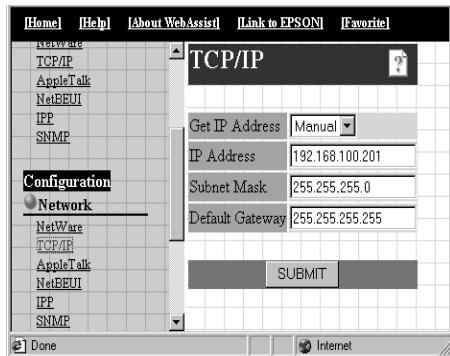
4. Select the "Get IP Address" method, either Auto or Manual. When you select Auto, DHCP become available. When you want to set the IP address manually, select Manual.

Note:
To use the DHCP server, it must be installed in your computer and must be correctly configured. See your operating system's online help for detailed instructions.

5. To assign the IP address manually, enter the IP address, the subnet mask, and the default gateway. Be sure to give an IP address which does not conflict with any other device on the network.

   Note:
   ❑ *The default subnet mask is 255.255.255.0 and the default gateway is 255.255.255.255.*

   ❑ *If there is a server or a router which functions as a gateway, enter the IP address of the server or router for the gateway address. If there is no gateway, leave the default values.*

6. Click SUBMIT and enter the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 10-30 for more information on setting the password.

7. If the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser and do not send a job to the printer until this message appears. Follow the on-screen instructions to reset the printer.

   Note:
   Since the new IP address becomes available after resetting the printer, you need to restart EpsonNet WebAssist by entering the new IP address.

Chapter 4

Settings for NetWare

This chapter explains how to configure the network adapter for NetWare. First, you need to set up the printer on a NetWare environment, and then configure the network adapter using EpsonNet WinAssist.

Overview

Supported systems

❏ Server environment

NetWare 3.1/3.11/3.12 (Bindery)
NetWare 4.1/4.11 (NDS, Bindery emulation)
IntranetWare (NDS, Bindery emulation)
NetWare 5™ (NDS, Queue-based system, NDPS® Gateway 2.0)

❏ Client environment

The client environment must be supported by NetWare. The clients are able to use the printer driver mounted on the network adapter.

About modes

You can choose from Print Server, Remote Printer, or Standby mode. We recommend that you select the Print Server mode unless the number of users exceeds the limit.

Features of the modes are described below.

Print Server mode (NDS/Bindery Print Server):

❏   High-speed printing with direct printing

❏   Uses the NetWare user account

❏   Ability to connect up to 8 file servers simultaneously

❏   Ability to register up to 32 print queues

Remote Printer mode:

❏   A NetWare user account is not required.

❏   A print server is necessary to control the remote printer.

❏   Ability to attach up to 16 printers for NetWare 3.1x, and up to 255 for NetWare 4.1x, IntranetWare, and NetWare 5.

Note:
When you turn on the printer, the user account is temporarily accessed in Remote Printer mode. If there is no room in the user account, turn on the printer before connecting the client to the network.

Standby mode (factory default mode):

The Standby mode is the default mode. With this mode, all NetWare related functions stop. Use Standby mode when you are not using the network adapter in a NetWare environment.

Instructions for using NetWare

Printing a text file

When you print a text file using the NPRINT command of
NetWare or DOS, redirection, misconversion or a gap in
characters might occur depending on the client environment.

PCONSOLE limitation

To use the network adapter in Print Server mode, you cannot
use the Print Server status display control with PCONSOLE.

Bindery and NDS

❏ The bindery context path can be confirmed from the server
console by the SET BINDERY CONTEXT command.

❏ If the bindery context path has not been set, or if you want to
use the print environment of another context from a non-NDS
client, it is necessary to specify the context for the bindery
context. Use SET BINDERY CONTEXT command to set the
context in the AUTOEXEC.NCF file.

❏ You cannot use the bindery print server mode with EpsonNet
WinAssist if you are using Novell Client for Windows 95/98
version 3.00 or Novell Client for Windows NT version 4.50.
To configure the network adapter for bindery mode, use
Novell IntranetWare Client or EpsonNet WebAssist.

See your NetWare 5 or NetWare 4.1x documentation for more
information.

IPX routing protocol "NLSP"

It is possible to set the IPX routing protocols "NLSP" from NetWare 4.1x or later; however, the network adapter does not support NLSP. RIP/SAP controls the communication.

You can select the routing protocol from a) NLSP with RIP/SAP Compatibility or b) RIP/SAP Only. If you remove the bind of RIP or SAP when NLSP with RIP/SAP Compatibility is specified, the network adapter is not able to communicate with the file server and NDS. (See "Protocols" and "Bindings" in NetWare's INETCFG utility.)

Time required to recognize the network adapter

It takes up to two minutes for the NetWare server to recognize the network adapter after turning on the printer. During this start-up time, the status sheet does not show the correct information.

Frame type

The same frame type should be used for the NetWare server and IPX router on the same network. If more than one frame type is used on the same network, bind all the frame types to the NetWare servers and IPX routers.

For NetWare 5

The IPX protocol must be installed (bound) to the NetWare 5 server.

About modes

If the mode you have logged in is different from the mode you set for the network adapter, a message appears when you try to configure the network adapter for NetWare. If you do not want to change the current settings, click Cancel and log in again in the same mode as you set for the network adapter.

Using Bindery Print Server (NetWare 3.1x/4.1x)

This section contains instructions on using the network adapter in Print Server mode under NetWare 3.1x/4.1x/IntranetWare with Bindery emulation.

Configuring for NetWare using EpsonNet WinAssist

Configure the network adapter using EpsonNet WinAssist.

Note:
The Novell Client32 or Novell IntranetWare Client must be installed in your computer. Do not use Novell Client for Windows 95/98 version 3.00 or Novell Client for Windows NT version 4.50.

1. Turn on the printer with the network adapter.

2. From any NetWare client, log in to the target NetWare server with supervisor privileges. You must log in with bindery connection.

3. Run EpsonNet WinAssist from the Start menu.

4. Click IPX. Select the printer you want to configure from the list, then click Configuration.

Note:
❏ *If you have connected more than one printer to the network, you can distinguish between the printers by the MAC address on the status sheet.*

❏ *If the IP address is set to the default IP address, the printer model may not appear.*

❏ *If printers do not appear in the IPX group, check that the printer is turned on. If it is on, check that the printer is in the same segment as the computer.*

❏ *You can search printers in other segments by setting the* Search Options-IPX *in the Tool menu in EpsonNet WinAssist. See "Search Options-IPX" on page 10-6 for more information.*

5. Click the NetWare tab to make the settings.

Note:
If the current login environment is different from the current configuration for the network adapter, a message appears. Follow the on-screen instructions.

6. Make the following settings for Printserver/bindery mode.
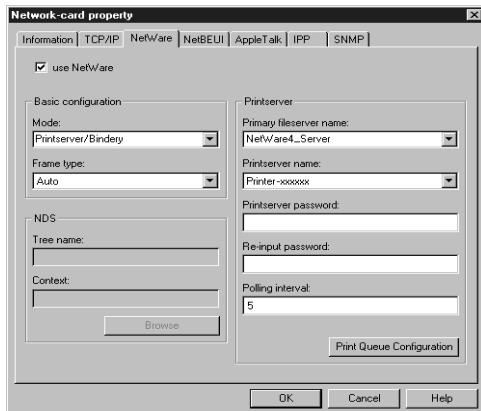
use NetWare:
Check this box when using NetWare. This check box is dimmed when NetWare cannot be used and when the IPX protocol is not supported with the network adapter.

Mode:
Select Printserver/bindery.

Frame type:
Select Auto. Do not select other frame types.

Tree name:
Leave as is.

Context:
Leave as is.

Primary fileserver name:
Select the file server which the print server logs in.

Printserver name:
Select the print server. You can also create a new print server by typing a name (up to 47 characters).

Printserver password:
Enter a password up to 20 characters long to be used when the network adapter logs in to the print server. To set a password, see the NetWare documentation for details. Usually you do not need to set a password.

Re-input password:
Enter the password again.

Polling interval:
Set the polling time from 5 to 90 seconds. To set the polling interval, see the NetWare documentation for details. Usually you do not need to change the polling interval.

Print Queue Configuration button:
Set the print queue. See the next step for more information. If you have already assigned the queue with PCONSOLE, NWAdmin, or EPSON Net!2 (an older version of the configuration utility), you need to assign the queue again here.

7. Make the following settings for the Print Queue Configuration.

   You can select or create a print queue to assign to the network adapter. The following dialog appears when you click Print Queue Configuration in the Printserver menu.
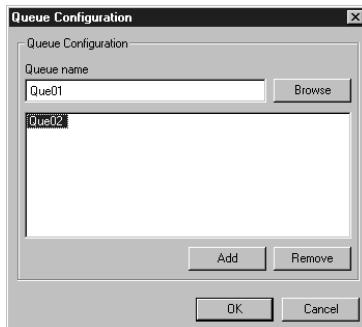
Queue name:
Displays the queue name assigned to the network adapter by browsing for the queue.

Browse:
Displays the hierarchy of the file server that you have logged in. You can select, create, or delete queues.

❏ Selecting a queue
Click the queue and click OK to select the queue.

❏ Creating a queue
Click the file server where you want to create a queue, and right-click it, and then select Create Queue. Enter the queue name (up to 47 characters).

❏ Deleting a queue
Select the print queue you want to delete, right-click it, and then select Delete Queue.

Queue list box:
List of the queues that are assigned to the print server.

Add button:
Adds a queue to the print server. Browse for the queue and then click Add.

Remove button:
Remove a queue from the queue list box.

8. After making the settings, click OK. The Password dialog box appears.

9. Enter your password (up to 20 characters) and click OK to save settings. If you are entering a password for the first time, click Change and set the password. For more information about passwords, see "About passwords" on page 10-7.

    Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

    > ***Caution:***
    > *Since it takes 2 or 3 minutes to send new settings to the network adapter, you must wait until the on-screen message appears before turning off your printer.*

    Note:
    ❏ *Since the new settings are sent to the network adapter, you must wait until this message appears before turning off the printer.*

    ❏ *Printer Objects (named PR0) are automatically created when you save the settings using EpsonNet WinAssist. Use PCONSOLE or NWAdmin to change the printer name.*

Using NDS Print Server (NetWare 4.1x/5)

This section contains instructions for using the network adapter in Print Server mode under NetWare 4.1x, IntranetWare, or NetWare 5 with NDS mode.

Configuring for NetWare using EpsonNet WinAssist

Configure the network adapter using EpsonNet WinAssist.

Note:
Be sure that the one of the following Clients is installed in your computer; Novell Client 32, Novell IntranetWare Client, or Novell Client.

1. Turn on the printer with the network adapter.

2. From any NetWare client, log in to the target context of the NDS tree as ADMIN.

3. Run EpsonNet WinAssist from the Start menu.

4. Click IPX. Select the printer you want to configure from the list, then click Configuration.

Note:
❏ *If you have connected more than one printer to the network, you can distinguish between the printers by the MAC address on the status sheet.*

❏ *If the IP address is set to the default IP address, the printer model may not appear.*

❏ *If printers do not appear in the IPX group, check that the printer is turned on. If it is on, check that the printer is in the same segment as the computer.*

❏ *You can search printers in other segments by setting the* Search Options *in the Tool menu in EpsonNet WinAssist. See "Search Options-IPX" on page 10-6 for more information.*

5. Click the NetWare tab to make the settings.

Note:
If the current login environment is different from the current configuration for the network adapter, a message appears. Follow the on-screen instructions.

6. Make the following settings for Printserver/NDS mode.
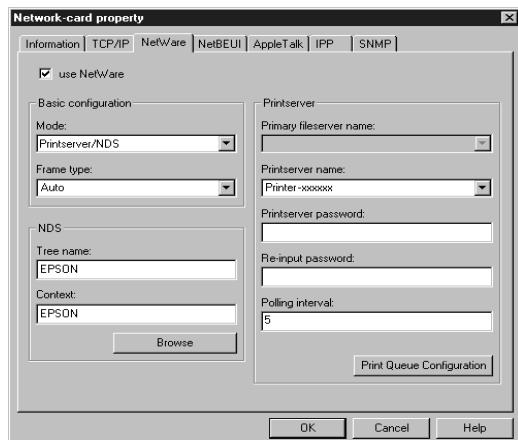
use NetWare:
Check this box when using NetWare. This check box is
dimmed when NetWare cannot be used and when the IPX
protocol is not supported with the network adapter.

Mode:
Select Printserver/NDS.

Frame type:
Select Auto. Do not select any other frame type.

Note for NDS:
❏ *Before you make settings for the Print Server in the right screen,
you must complete the Tree name and context.*

❏ *Novell Client service must be installed in the computer to make
NDS settings.*

❏ *See the NetWare documentation for available characters and the
number of characters you can set.*

Tree name:
Click Browse and select the NDS Tree.

Context:
Click Browse and select the NDS context.

Browse button:
Displays the NDS Tree view. Select the NDS context. The
selected context and its Tree name are input in the appropriate
text box. Print server setting items on the right are dimmed
until the Tree and context are selected.

Primary fileserver name:
Leave as is.

Printserver name:
Print servers that belong to the context you specified are
listed. Select the print server. You can also create a new print
server by typing a name (up to 47 characters).

Printserver password:
Enter a password up to 20 characters long to be used when the network adapter logs in to the print server. To set a password, see the NetWare documentation for details. Usually you do not need to set a password.

Re-input password:
Enter the password again.

Polling interval:
Set the polling time from 5 to 90 seconds. To set the polling interval, see the NetWare documentation for details. Usually you do not need to change the polling interval.

Print Queue Configuration button:
Set the print queue. See the next step for more information. If you have already assigned the queue with PCONSOLE, NWAdmin, or EPSON Net!2 (an older version of the configuration utility), you need to assign the queue again here.

7. Make the following settings for Print Queue Configuration.

You can select or create a print queue to assign to the network adapter. The following dialog appears when you click Print Queue Configuration.

Note:
You can make queue settings for a higher context than the context you specified in the NDS Context box. In this case, you must have an ADMIN right for the context in which you set the queue.
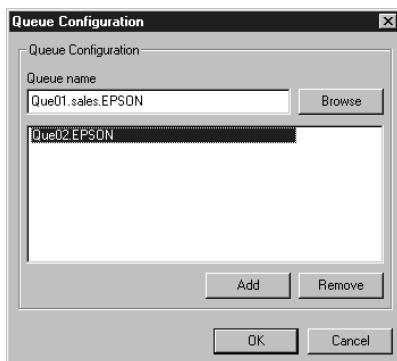
Queue name:
Displays the queue name that is assigned to the network adapter by browsing the queue.
Default: *the print queue name.OU.O* (OU stands for Organization Unit and O stands for Organization)

Browse:
Displays the NDS tree view that you have specified in NDS setting. You can select, create, or delete queues.

❏ Selecting a queue
Click the queue and click OK to select the queue.

❏ Creating a queue
Select the context where you want to create a queue, right-click it, and then select Create Queue. Type a queue name (up to 47 characters). Select a server where you create a queue for the Create queue server. The queue will be created under the SYS volume of the file server. If you want to create a queue in another volume, use PCONSOLE or NWAdmin to create a queue.

❏ Deleting a queue
Select the print queue you want to delete, right-click it, and then select Delete Queue.

Queue list box:
List of the queues assigned to the print server.

Add button:
Adds a queue to the print server. Browse for the desired queue and then click Add.

Remove button:
Remove a queue from the queue list box.

8. After making the settings, click OK. The Password dialog box appears.

9. Enter your password (up to 20 characters) and click OK to save settings. If you are entering a password for the first time, click Change and set the password. For more information about passwords, see "About passwords" on page 10-7.

   Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

   > *Caution:*
   > *Since it takes 2 or 3 minutes to send new settings to the network adapter, you must wait until the on-screen message appears before turning off your printer.*

   Note:
   ❏ *Since it takes time for the new settings to be sent to the network adapter, you must wait until this message appears before turning off the printer.*

   ❏ *The Printer Objects are automatically created with the following format when you save the settings using EpsonNet WinAssist. Use PCONSOLE or NWAdmin to change the printer name.*
   > *print server name_ P0*

Using Remote Printer (NetWare 3.1x/4.1x/5)

This section contains instructions on using the network adapter in Remote Printer mode under NetWare 3.1x, 4.1x, 5, or IntranetWare.

First, you need to make printer environment using PCONSOLE or NWAdmin (NetWare Administrator tool). See the target section to make printer environment.

❏ NetWare 3.1x
"Making the printer environment with PCONSOLE" on page 4-19.

❏ NetWare 4.1x/IntranetWare
"Making the printer environment with Bindery mode" on page 4-22.

❏ NetWare 4.1x/IntranetWare/NetWare 5
"Making the printer environment with NDS mode" on page 4-25.

Note:
Be sure that the one of the following Clients is installed in your computer; Novell Client 32 or Novell IntranetWare Client.

Making the printer environment with PCONSOLE

For NetWare 3.1x users, follow the steps below to make the printer environment with PCONSOLE.

Creating print queues in a file server

1. From any NetWare client, log in to the network with supervisor privileges.

2. Run PCONSOLE. From the Available Options screen, select Print Queue Information and press Enter.

```
┌─────────────────────────────────┐
│       Available Options         │
├─────────────────────────────────┤
│Change Current File Server       │
│Print Queue Information          │
│Print Server Information         │
└─────────────────────────────────┘
```

3. Press the Insert key on your keyboard and enter the print queue name. Press Enter.

   Note:
   Since your clients need the print queue name you set here when they use the printer, announce the print queue name to your clients.

4. From the Print Queue list, select the print queue name that you just entered and press Enter. From the Print Queue Information list, select Queue Users and press Enter. Next, select EVERYONE from the list. If EVERYONE is not in the list, press Insert and select EVERYONE from the queue user list.

Creating a print server

1. From the Available Options screen, select Print Server Information and press Enter.

```
╔═══════════════════════════════╗
║      Available Options        ║
╠═══════════════════════════════╣
║Change Current File Server     ║
║Print Queue Information        ║
║Print Server Information        ║
╚═══════════════════════════════╝
```

2. Press the Insert key on your keyboard and type the print server name. Press Enter. It is a good idea to write down the print server name for later use.

3. From the Print Server list, select the print server name that you just typed and press Enter.
   From the Print Server Information list, select Print Server Configuration and press Enter.

```
╔═══════════════════════════════╗
║    Print Server Information    ║
╠═══════════════════════════════╣
║Change Password                ║
║Full Name                      ║
║Print Server Configuration     ║
║Print Server ID                ║
║Print Server Operators         ║
║Print Server Users             ║
╚═══════════════════════════════╝
```
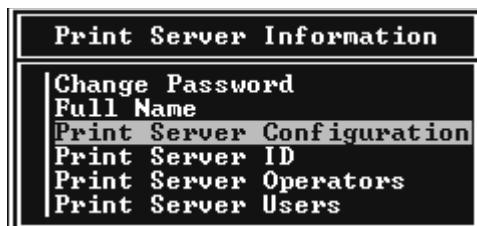
4. Select Printer Configuration from the Print Server Configuration Menu and press Enter.

```
╔════════════════════════════════╗
║ Print Server Configuration Menu ║
╠════════════════════════════════╣
║File Servers To Be Serviced     ║
║Notify List for Printer         ║
║Printer Configuration           ║
║Queues Serviced by Printer      ║
╚════════════════════════════════╝
```
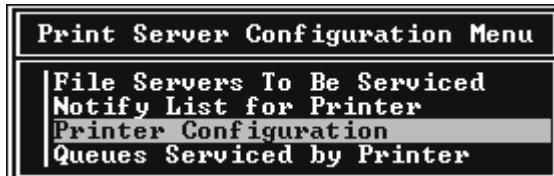
5. From the Configured Printers list, select Not Installed (port number = 0) and press Enter.

```
┌──────────────────────────────────┐
│       Configured Printers        │
├──────────────────────────────┬───┤
│ Not Installed                │ 0 │
│ Not Installed                │ 1 │
│ Not Installed                │ 2 │
│ Not Installed                │ 3 │
│ Not Installed                │ 4 │
│ Not Installed                │ 5 │
│ Not Installed                │ 6 │
│ Not Installed                │ 7 │
│ Not Installed                │ 8 │
│ Not Installed                │ 9 │
│ Not Installed                │10 │
│ Not Installed                │11 │
│ Not Installed                │12 │
│ Not Installed                │13 │
│ Not Installed                │14 │
│ Not Installed                │15 │
└──────────────────────────────┴───┘
```

6. From the Printer configuration screen, type the printer name. Highlight Type and press Enter. Select Remote Parallel, LPT1 for Remote Printer mode.

```
┌──────────────────────────────────────────────┐
│            Printer 0 configuration           │
├──────────────────────────────────────────────┤
│ Name: Printer 0                              │
│ Type: Remote Parallel, LPT1                  │
│                                              │
│ Use interrupts:     Yes                      │
│ IRQ:                7                        │
│                                              │
│ Buffer size in K:   3                        │
│                                              │
│ Starting form:      0                        │
│ Queue service mode: Change forms as needed   │
│                                              │
│ Baud rate:                                   │
│ Data bits:                                   │
│ Stop bits:                                   │
│ Parity:                                      │
│ Use X-On/X-Off:                              │
└──────────────────────────────────────────────┘
```

Note:
Be sure to select Remote Parallel, LPT1 *for Remote Printer mode.*

7. Press Esc; then press Enter to save your changes.

8. Press Esc.

9. Select Queues Serviced by Printer from the Print Server Configuration menu and press Enter.

```
┌─────────────────────────────────────────┐
│  Print Server Configuration Menu         │
├─────────────────────────────────────────┤
│  File Servers To Be Serviced             │
│  Notify List for Printer                 │
│  Printer Configuration                   │
│  Queues Serviced by Printer              │
└─────────────────────────────────────────┘
```
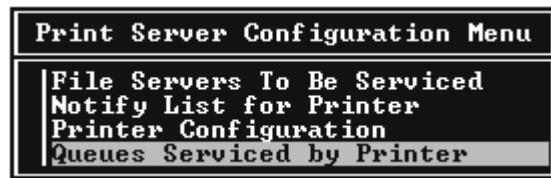
10. Select the printer that you want to use from the Defined Printers list and press Enter.

11. Press the Insert key and assign a queue to the print server port from the Available Queues list.

12. Specify a priority level between 1 to 10. One is top priority.

13. Press Esc to exit PCONSOLE.

Now go to the section "Configuring for NetWare using EpsonNet WinAssist" on page 4-30.

Making the printer environment with Bindery mode

Follow the steps below to make the printer environment under NetWare 4.1x and Intranet Ware with Bindery emulation.

Note:
❏ *Assign Trusteeships for users if necessary.*

❏ *Be sure to use PCONSOLE to set the print queue and print server instead of using NWAdmin.*

1. Turn on the printer with the network adapter.

2. From any NetWare client, log in to the server as a SUPERVISOR. Make sure to log in with Bindery connection.

   Note:
   If the client using for this setting has been logged in with NDS mode, press F4 key while PCONSOLE is starting to switch to the bindery mode.

3. Run PCONSOLE. From the Available Options screen, select Print Queues and press Enter. Press Insert and type the print queue name. Press Enter.

   Note:
   Since your clients need the print queue name you set here when they use the printer, announce the print queue name to your clients.

4. From the Print Queue list, select the print queue name that you just entered and press Enter. From the Print Queue Information list, select Queue Users and press Enter. Next, select EVERYONE from the list. If EVERYONE is not in the list, press Insert and select EVERYONE from the queue user list.

5. From the Available Options screen, select Print Servers and press Enter. Press Insert and type the print server name. Press Enter.

6. Press Esc to exit PCONSOLE, and log out from the server.

7. Log in to the server as an ADMIN. Be sure to log in with NDS connection.

8. Start NWAdmin.

9. To create the Printer Object, click the container specified as the Bindery context and select Create from the Object menu, then Printer. Type the printer name and click Create.

10. To assign the print queue, double-click the Printer object icon (created in step 9). The Printer dialog box appears.

11. Click Assignments and then click Add. From the print queue list, select the queue (created in step 3) and click OK.

12. Click Configuration in the Printer dialog box, and select Parallel from the Printer type pull-down menu.

13. Click Communication. The Parallel Communication dialog box appears.

14. Select LPT1 for Port; check Polled for Interrupts; and check Manual load (Remote from Print Server) for Connection type, then click OK.

15. Click OK in the Printer dialog box.

16. To assign the printer, double-click the Print Server object icon (created in step 5). The Print Server dialog box appears.

17. Click Assignments and then click Add. From the printer object list, select the printer object (created in step 9) and click OK.

18. In the Print Server dialog box, select the assigned printer from the printer object list, and click the Printer Number button to set the printer number from 0 to 15, then click OK.

19. To confirm the objects you have assigned, double-click the Print Server object icon. Click Print Layout, and check that the print server, printer, and print queue are connected.

Now go to the section "Configuring for NetWare using EpsonNet WinAssist" on page 4-30.

Making the printer environment with NDS mode

Follow the steps below to make the printer environment using NWAdmin under NetWare 4.1x, Intranet Ware, and NetWare 5 with NDS mode

1. Turn on the printer with the network adapter.

2. From any NetWare client, log in to the target context of the NDS tree as an ADMIN.

3. Run the Administrator tool (NWAdmin).

4. Create a printer:

   Click the directory context icon, and select Create from the Object menu, then Printer. Type the Printer name and click Create.

5. Create a print server:

   Click the directory context icon, and select Create from the Object menu, then Print Server. Type the Print Server name and click Create.
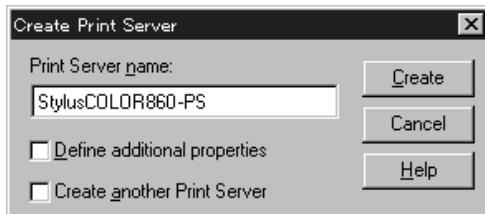
6. Create a print queue:

   Click the directory context icon, and select Create from the
   Object menu, then Print Queue. Type the Print Queue name
   and select the Print Queue Volume, then click Create.
   Double-click the print queue object, and register the user.

   Note:
   Since your clients need the print queue name you set here when they
   use the printer, announce the print queue name to your clients.

   Create Print Queue

   - Directory Service Queue
   - Reference a bindery queue

   Print Queue name:

   StylusCOLOR860-Q

   Print Queue Volume:

   MAXNW411_SYS.max.EPKOWA

   - Define additional properties
   - Create another Print Queue
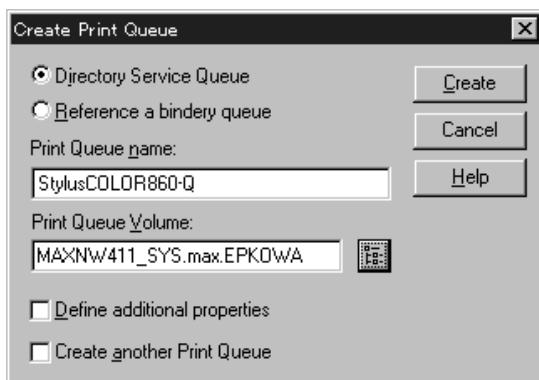
   Create
   Cancel
   Help

7. Double-click the Printer Object icon in the NetWare Administrator screen.
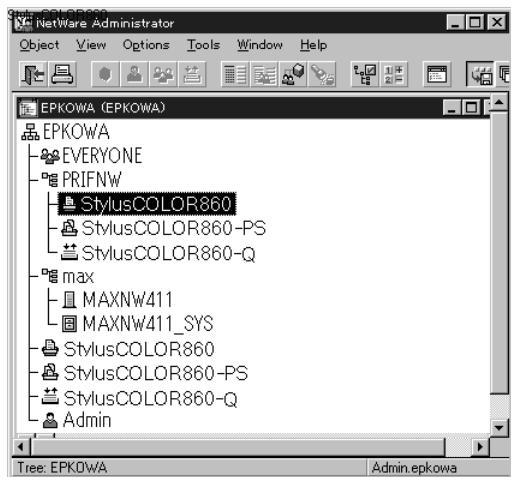
8. In the Printer dialog box appears, click Assignments and then click Add.
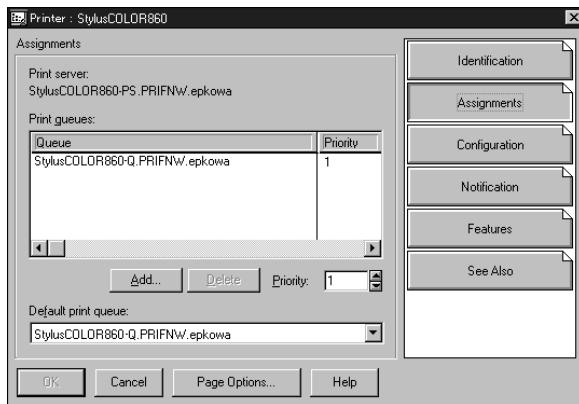
9. From the print queue list, select the queue you created in step 6 and click OK.

10. Click Configuration, and select Other/Unknown for the Printer type list box and click OK.
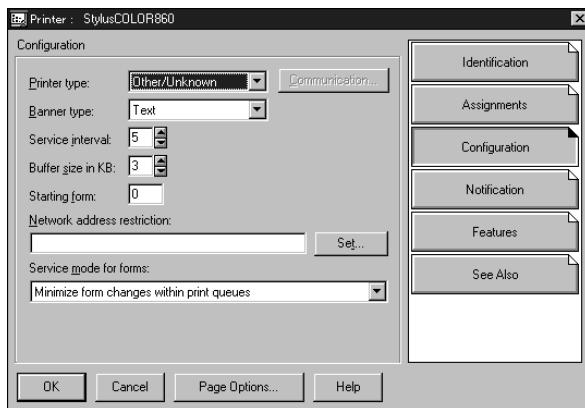
11. Double-click the Print Server Object icon in the NetWare Administrator screen.

12. In the Print Server dialog box that appears, click Assignments and then click Add.
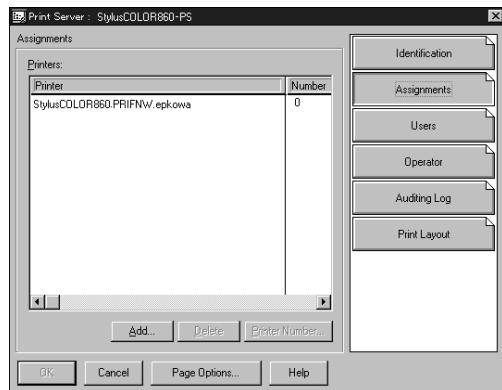
13. From the printer object list, select the printer object you want to assign and click OK.

14. Go back to the screen in step 12, and click the Printer Number button to set the printer number from 0 to 254.
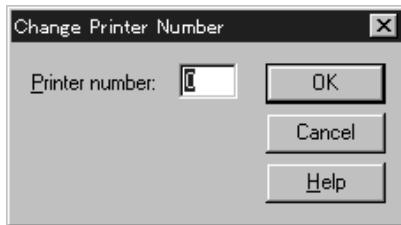
15. To confirm the objects you have assigned, double-click the Print Server object icon. Click Print Layout, and check that the print server, printer, and print queue are connected.

See your NetWare documentation for more detailed information.

Now go to the next section "Configuring for NetWare using EpsonNet WinAssist" on page 4-30.

Configuring for NetWare using EpsonNet WinAssist

Configure the network adapter using EpsonNet WinAssist.

1. Turn on the printer with the network adapter.

2. From any NetWare client, log in to the target NetWare server with supervisor privileges or as an ADMIN.

3. Load the print server from the file server's system console which the print queue volume is set.
    >LOAD PSERVER print server name you set using PCONSOLE or NWAdmin

4. Run EpsonNet WinAssist from the Start menu.

5. Click IPX. Select the printer you want to configure from the list, then click Configuration.
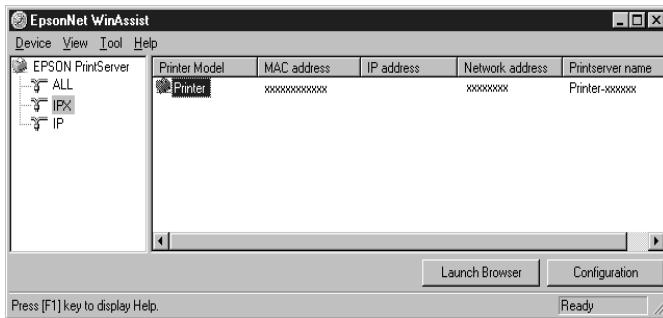
Note:

❏ *If you have connected more than one printer to the network, you can distinguish between the printers by the MAC address on the status sheet.*

❏ *If the IP address is set to the default IP address, the printer model may not appear.*

❏ *If printers do not appear in the IPX group, check that the printer is turned on. If it is on, check that the printer is in the same segment as the computer.*

❏ *You can search printers in other segments by setting the* Search Options *in the Tool menu in EpsonNet WinAssist. See "Search Options-IPX" on page 10-6 for more information.*

6. Click the NetWare tab to make the settings.

Note:
If the current login environment is different from the current configuration for the network adapter, a message appears. Follow the on-screen instructions.

7. Make the following settings for Remote printer mode.
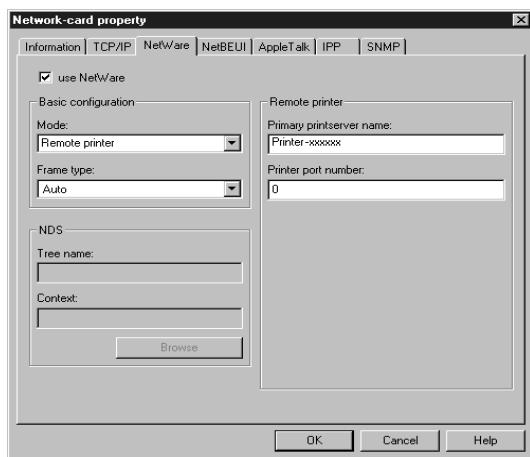
use NetWare:
Check this box when using NetWare. This check box is dimmed when NetWare cannot be used and when the IPX protocol is not supported with the network adapter.

Mode:
Select Remote printer.

Frame type:
Select Auto. Do not select other frame types.

Tree name:
Leave as is.

Context:
Leave as is.

Primary printserver name:
Enter the print server name which you have created using PCONSOLE or NWAdmin.

Printer port number:
Enter the same port number you assigned to the print server using PCONSOLE or NWAdmin.

8. After making the settings, click OK. The Password dialog box appears.

9. Enter your password (up to 20 characters) and click OK to save settings. If you are entering a password for the first time, click Change and set the password. For more information about passwords, see "About passwords" on page 10-7.

    Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

> **!** *Caution:*
> *Since it takes 2 or 3 minutes to send new settings to the network adapter, you must wait until the on-screen message appears before turning off your printer.*

Note:
Since the new settings are sent to the network adapter, you must wait until this message appears before turning off the printer.

Using NDPS Gateway (NetWare 5)

This section contains instructions on printing using Novell Distributed Print Services® (NDPS®) with Novell® NetWare® 5™. Novell Distributed Print Services (NDPS) is the new generation print services of NetWare 5.

Note:
❏ *Automatic installation of NDPS is not supported.*

❏ *Banners cannot be printed with NDPS.*

❏ *The Status Monitor 2 utility cannot be used with NetWare 5 under Windows NT 4.0.*

❏ *For detailed information about NDPS, see the NetWare 5 online documentation.*

Make sure of the following points before starting;

❏ When you install NetWare 5, install "IPX" ("IP" is installed by default).

❏ When you use the network adapter with Bindery (either in Print Server mode or Remote Printer mode), you need PCONSOLE.EXE to create bindery objects such as Print Server and Print Queue object. Since PCONSOLE.EXE does not come with NetWare 5, you need to get the file from Novell.

Outline of settings

The following are basic steps to follow in order to use the network adapter with the NDPS printing system. Detailed procedures are described in the next sections.

1. Select the Connection Type and make the printer environment on the Server and Clients.

2. Create an NDPS Manager object in NetWare Administrator.

3. Create a Printer Agent in NetWare Administrator.

4. Configure the network adapter using EpsonNet WinAssist.

5. Set the printer on the client workstations.

The environment, the settings you make, and tools you use will differ depending on the printer type and connection type you choose. You can create an NDPS Manager and Printer Agent in NetWare Administrator or partially via the Server Console. See the NetWare 5 online documentation for more details.

Making printer environment

1. Select the Connection Type from the following: Remote (rprinter on IPX), Remote (LPR on IP), or Forward jobs to a Queue (via the current legacy queue-based print services).

2. Install (bind) the following protocols on the server depending on the connection type you use.

   ❏ For Remote (rprinter on IPX) connection, install IPX

   ❏ For Remote (LPR on IP) connection, install TCP/IP

   ❏ For Forward jobs to a Queue connection, install IPX

3. Install the appropriate Client Software on client workstations. Make sure they install NDPS.

4. Install printer drivers on client workstations. See the printer manual for the installation.

   Note:
   ❏ *Do not install the printer drivers via the NetWare server.*

   ❏ *Do not add printers and do not install printer drivers using Novell Print Manager (NWPMW32.EXE).*

Creating an NDPS Manager

1. Run NetWare Administrator (NWADMN32.EXE) on the client machine.

   The main browser window appears.

2. To create an NDPS Manager, click the Directory context icon, then select Create from the Object menu.

3. Select NDPS Manager from the list.

4. Enter the NDPS Manager name in the NDPS Manager Name field.

5. Browse the Resident Server and select where you want the NDPS Manager assigned.

6. Browse the Database Volume and select where you want the NDPS Manager database assigned.

7. Click Create.

   The NDPS Manager appears in the main browser window.

8. Type LOAD NDPSM at the server console, and select the NDPS Manager you have created.

Creating a Printer Agent

After creating an NDPS Manager, you can create Printer Agents, either public access printers or controlled access printers. The way to create a Printer Agent differs depending on the printer type you choose. The following are the features of public access printers and controlled access printers.

❏ Public Access Printers:
NDPS printers that are available to all network users and not associated with an NDS object. Users can select and print to any public access printer they can view from their workstations. However, these printers do not take full advantage of services such as security and job event notification.

❏ Controlled Access Printers:
NDPS printers that are added to the NDS tree by NetWare Administrator. They are only available to the workstation user through the NDS object list. These printers can take full advantage of the security and management features provided by NDS.

1. Select the printer type either public access printer or controlled access printer.

2. Create a public access printer. If you want to create a controlled access printer, go to step 3.

   In NetWare Administrator, double-click the NDPS Manager you have created. Click Printer Agent List button, then click New. Enter the Printer Agent name, and select Novell Printer Gateway for the Gateway Type. Click OK. Go step 4.

3. Create a controlled access printer.

   In NetWare Administrator, select the Directory context icon. Select Create from the Object menu, then select NDPS Printer. Enter the Printer Agent name, select Create a new Printer Agent, then click Create. Select the NDPS Manager you have created, and select Novell Printer Gateway for the Gateway Type. Click OK.

4. Select None for the Printer Type, and Novell Port Handler for the Port Handler Type, then click OK.

5. Select the Connection type, and configure it as follows.

❏ For Remote (rpinter on IPX) connection
Print a status sheet of the network adapter and configure
the corresponding items.
Port Type: Select LPT1.
SAP Name: Enter the Primary Print Server Name.
Printer Number: Enter the Printer Port Number.
Network: Enter the Network Address.
Node: Enter the MAC Address.
Interrupt: Select None.

❏ For Remote (LPR on IP) connection
IP Address: Enter the IP address of the network adapter.
You can confirm the IP address on a status sheet.

❏ For Forward jobs to Queue connection
Queue Name: Enter the queue name that the network
adapter uses in legacy queue-based print services (either
in Print Server mode or Remote Printer mode).
Queue User Name: Type a user name who has rights for
the above queue.
Password: Enter the password that the Queue User uses
to login to the server.

6. Select None for the Printer Driver.

7. Confirm the Printer Agent that you have just created.

   In NetWare Administrator, double-click the NDPS Manager
   object and click the Printer Agent List button. Check that the
   status of the Printer Agent you have just created is "Idle".

   Note:
   *If you have selected Remote (rprinter on IPX), configure the network
   adapter using EpsonNet WinAssist, as described in the next section,
   and then print a status sheet.*

Go to the next section if you select Remote (rpinter on IPX).
Go to "Setting up the printer on a client workstation" on page 4-42
if you select Remote (LPR on IP) or Forward jobs to Queue.

Configuring for NetWare using EpsonNet WinAssist

Follow the steps below if the printer is a Remote (rprinter on IPX) connection.

Note:
❏ *The following configuration is not necessary if the printer is a Remote (LPR on IP) connection or Forward jobs to a Queue connection.*

❏ *Be sure that the one of the following Clients is installed in your computer; Novell Client 32, Novell IntranetWare Client, or Novell Client.*

1. Turn on the printer with the network adapter.

2. From any NetWare client, log in to the target NetWare server as an ADMIN.

3. Run EpsonNet WinAssist from the Start menu.

4. Click IPX. Select the printer you want to configure from the list, then click Configuration.

Note:
❏ *If you have connected more than one printer to the network, you can distinguish between the printers by the MAC address on the status sheet.*

❏ *If the IP address is set to the default IP address, the printer model may not appear.*

❏ *If printers do not appear in the IPX group, check that the printer is turned on. If it is on, check that the printer is in the same segment as the computer.*

❏ *You can search printers in other segments by setting the* Search Options *in the Tool menu in EpsonNet WinAssist. See "Search Options-IPX" on page 10-6 for more information.*

5. Click the NetWare tab to make the following settings.

Note:
If the current login environment is different from the current configuration for the network adapter, a message appears. Follow the on-screen instructions.

use NetWare:
Check this box when using NetWare. This check box is dimmed when NetWare cannot be used and when the IPX protocol is not supported with the network adapter.

Mode:
Select Remote printer.

Frame type:
Select Auto. Do not select other frame types.

Tree name:
Leave as is.

Context:
Leave as is.
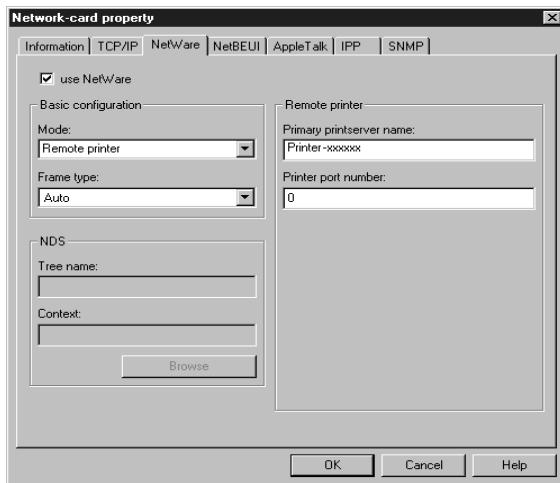
Primary printserver name:
Enter the SAP name you created as described page 4-38 (up to 47 characters).

Printer port number:
Enter the same port number as you set for the print server page 4-38 (from 0 to 254).

6. After making the settings, click OK.

   The Password dialog box appears.

7. Enter your password (up to 20 characters) and click OK to save settings. If you are entering a password for the first time, click Change and set the password. For more information about passwords, see "About passwords" on page 10-7.

   Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

   > *Caution:*
   > *Since it takes 2 or 3 minutes to send new settings to the network adapter, you must wait until the on-screen message appears before turning off your printer.*

Setting up the printer on a client workstation

After configuring the network adapter, set up the printer on client workstations.

Note:
Do not add printers and do not install printer drivers using Novell Print Manager (NWPMW32.EXE).

1. Install the printer driver.

2. Change the Ports on the printer's properties dialog box. Specify the following objects for the port.

   ❏ **For Public Access Printers:**
      The Printer Agent you have created in "NDPS Public Access Printers" under Network Group.

   ❏ **For Controlled Access Printers:**
      The Printer Agent you have created in the NDS tree.

See the NetWare 5 online documentation for details.

Configuring for NetWare Using EpsonNet WebAssist

You can configure the network adapter for NetWare using EpsonNet WebAssist.

Note:
❏ *You cannot create a print server, print queue, or printer with EpsonNet WebAssist. You must have created these objects before using EpsonNet WebAssist.*

❏ *A web browser must be installed in your computer.*

❏ *TCP/IP must be correctly set for the computer and network adapter.*

❏ *Do not operate EpsonNet WinAssist/MacAssist and EpsonNet WebAssist for the printer at the same time.*

❏ *There are some restrictions on the characters you can use depending on your browser. For details, see your browser or OS manual.*

1. Turn on the printer with the network adapter.

2. Run EpsonNet WebAssist by either way below.

    ❏ Run EpsonNet WinAssist or EpsonNet MacAssist. Click the printer you want to configure from the list and click Launch Browser.

    ❏ Open your browser, and type in the IP address of the network adapter directly. Do not run EpsonNet WinAssist or MacAssist.

        http://*the IP address of the network adapter*/

3. Click NetWare under Network on the Configuration menu to view the NetWare setting screen.
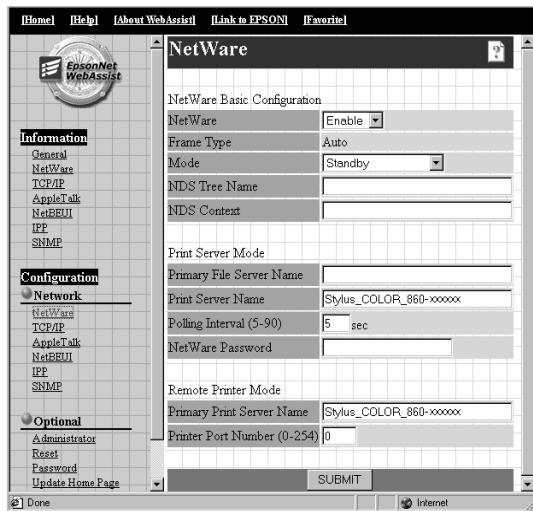
4. Choose Enable to use NetWare.

Note:
If Disable *is on, all NetWare related functions stop. Select Disable to avoid being charged for an extra dial-up.*

5. Auto is displayed for the Frame Type.

6. Select the Mode.

❏ Select NDS Print Server for NetWare 4.1x or NetWare 5 with NDS mode.

❏ Select Bindery Print Server for NetWare 3.1x, or NetWare 4.1x with Bindery mode.

❏ Select Remote Printer for the Remote Printer under NetWare 3.1x, NetWare 4.1x, or NetWare 5.

❏ Select Standby when not using NetWare, or when problems arise from setting NetWare to Enable.

7. When using NDS mode, enter the NDS Tree name (up to 31 characters) and the NDS Context without "." at the top (up to 255 characters). Leave these items blank if using Remote Printer mode.

8. When you select NDS Print Server or Bindery Print Server for the Mode, make the Print Server settings.

   Primary File Server Name:
   Set the file server which the print server logs in (up to 47 characters) if the mode is Bindery Print Server.

   Print Server Name:
   Set the print server name (up to 47 characters).

   Polling Interval:
   Set the polling time from 5 to 90 seconds. Usually this value does not need to be changed.

   NetWare Password:
   Set a password up to 20 characters to be used when the network adapter logs in to the print server. Usually this value does not need to be changed.

9. When you select Remote Printer for the Mode, make the Remote Printer settings.

   Primary Print Server Name:
   Set the print server name (up to 47 characters).

   Printer Port Number:
   Set the same port number you assigned to the print server.

10. Click SUBMIT and enter the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 10-30 for more information on setting the password.

11. If the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser and do not send a job to the printer until this message appears. Follow the on-screen instructions to reset the printer.

Instructions for Using a Dial-Up Network

This section explains about using a dial-up network.

Note:
The primary server described in this manual indicates a primary time server which offers time to the workstations on the network.

Using a dial-up network in each mode

Print Server mode
You must use a dedicated dial-up line.
Since polling is performed on the file server in the print server mode, no vicarious response by the router is possible. Therefore, no dial-up connection is possible in this case.

Remote Printer mode
In Remote Printer mode, use of a router with a vicarious response function allows the primary server to be installed at the dial-up destination. However, an extra account might be generated when the primary server is down. To avoid that, it is recommend to use connections via a dedicated dial-up line.

Follow the instructions for using a dial-up line.

When there is a primary server at the dial-up destination

For local networks with file servers:

Printer — File server — Dial-up router — Dial-up router — Primary file server (primary print server)

Local network — Remote network
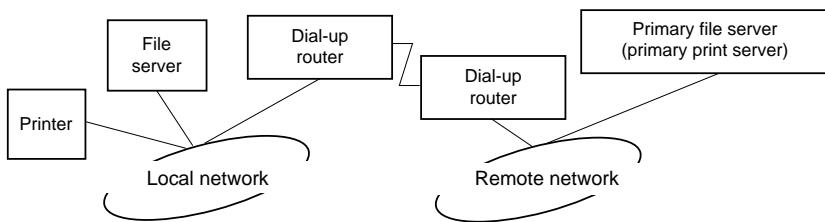
❏ When the power is turned on

A dial-up is generated because access is made to a local file server first and then to a primary server. There is no problem since this dial-up only occurs at startup.

❏ When the network adapter is not correctly set

A dial-up is generated because access is made to a local file server first and then to a primary server. This dial-up is repeated at intervals of approximately 5 minutes. Make the network adapter settings correctly to avoid this problem.

❏ During normal operation (standby)

An SPX Watchdog packet is sent according to the NetWare protocol convention. Use a router with a vicarious response function to avoid a dial-up.

❏ During normal operation (printing)

A dial-up is generated while the printing data is being transferred. This is not a problem because it is a dial-up specific to the dial-up network.

❏ When the primary server is down during operation

A dial-up is generated because a connection to the primary server is attempted periodically. Since this is attributable to the automatic re-connection function, turn off the printer with the network adapter once.

❏ When the file server on the local network is down

When there is no file server on the local network, NetWare cannot be used on the local network. In this case, the NetWare protocol for the network adapter is also not available. No dial-up is generated under this condition. When the file server on the local network is restored, the network adapter is also automatically restored.

For local networks with no file server:
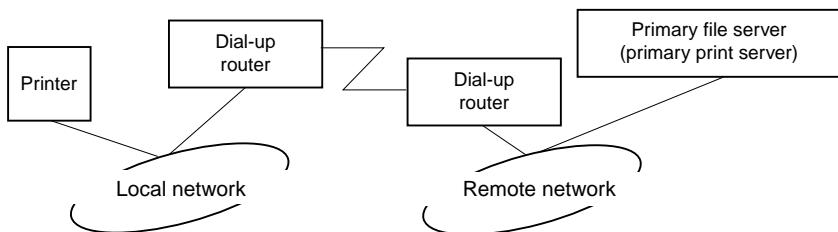
Depending on the router setting, the NetWare protocol can be used without a file server on the local network. This case also follows the first five described above.

For local networks with a primary server

Even if a primary server is installed on the local network, an unnecessary dial-up may be generated depending on the configuration.

The following problems are common to both Print Server mode and Remote Printer mode.
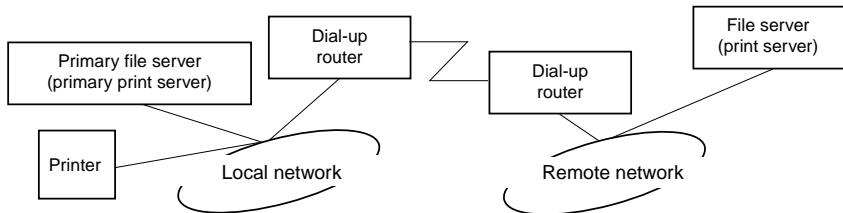
❏ When the power is turned on

Since access is made only to the primary server, no dial-up is generated.

❏ When the network adapter is not correctly set

Since access is made only to the primary server, no dial-up is generated. However, if the file server/print server of the remote network is erroneously set as the primary server, an unnecessary dial-up might be generated. Correct the settings to avoid this problem.

❏ During normal operation (standby/printing)

Since access is made only to the primary server, no dial-up is generated.

❏ When the primary server is down during operation

Connection to the primary server is periodically attempted, but no dial-up is generated. However, if the router is set to pass SAP packets (Find Nearest Server), an unnecessary dial-up might be generated. To avoid this, turn off the printer once, or do not allow the router to pass SAP packets (Find Nearest Server).

Chapter 5

Settings for Windows 98/95

This chapter explains TCP/IP (LPR) printing and NetBEUI printing under Window 98/95.

Supported systems

The supported systems are as follows:

❏ Printing via EpsonNet Direct Print (TCP/IP)

❏ Microsoft Windows Network (NetBEUI)

❏ Internet Printing Protocol (IPP). See Chapter 13, "EpsonNet Internet Print Utility."

Printing with TCP/IP via EpsonNet Direct Print

Since Windows 98/95 do not support LPR printing, standard TCP/IP printing cannot be used. However, you can print via TCP/IP using the EpsonNet Direct Print utility. For detailed information, see Chapter 11, "EpsonNet Direct Print Utility."

Printing with NetBEUI

This section explains how to configure the network adapter for NetBEUI using EpsonNet WinAssist or WebAssist.

Note:
Be sure that the NetBEUI protocol and Client for Microsoft Networks are installed in your computer. See "Installing the NetBEUI Protocol" on page A-10 for instructions.

Configuring for NetBEUI using EpsonNet WinAssist

You can use the network adapter with the default setting for NetBEUI. If you want to change the default setting, use EpsonNet WinAssist or WebAssist. The default values for NetBEUI are as follows;

Items	Default values
NetBIOS name	EPxxxxxx
Workgroup name	WORKGROUP
Device name	EPSON

To configure the network adapter for NetBEUI, follow the steps below.

Note:
❏ *TCP/IP or IPX must be installed on your computer.*

❏ *Before following the steps below, you must have set the IP address for the network adapter or logged in to the NetWare server's NDS context as an ADMIN.*

1. Turn on the printer with the network adapter.

2. Run EpsonNet WinAssist from the Start menu.

3. Select the printer you want to configure from the list, then click Configuration or double-click the printer.

Note:

❏ *If you have connected more than one printer to the network, you can distinguish between the printers by the MAC address on a status sheet.*

❏ *If the IP address is set to the default IP address, the printer model may not appear.*

❏ *You can search printers in other segments by setting the Search Options in the Tool menu in EpsonNet WinAssist. See "Optional settings" on page 10-4 for more information.*

4. Click the NetBEUI tab, and make the following settings.

use NetBEUI:
Select this box when using NetBEUI. This check box is dimmed when the NetBEUI protocol is not supported with the network adapter.

NetBIOS name:
Enter the printer's NetBIOS name, which is the computer name on the network (up to 15 characters). Be sure to give a unique name. The default name is "EPxxxxxx" (xxxxxx are last 6 digits of the MAC Address).

Workgroup name:
Enter the workgroup name or domain name (up to 15 characters) used for the Windows network environment.

Device name:
Enter the printer's device name (up to 12 characters). LPT1, LPT2, LPT3, and COM cannot be used.

5. After making the settings, click OK. The Password dialog box appears.

6. Enter your password (up to 20 characters) and click OK to save settings. If you are entering a password for the first time, click Change and set the password. For more information about passwords, see "About passwords" on page 10-7.

Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

> *Caution:*
> *Since it takes 2 or 3 minutes to send new settings to the network adapter, you must wait until the on-screen message appears before turning off your printer.*

Configuring for NetBEUI using EpsonNet WebAssist

Note:
❏ *A web browser must be installed in your computer.*

❏ *TCP/IP must be correctly set for the computer and network adapter.*

❏ *Do not operate EpsonNet WinAssist and EpsonNet WebAssist for the printer at the same time.*

❏ *There are some restrictions on the characters you can use depending on your browser. For details, see your browser or OS documentation.*

1. Turn on the printer with the network adapter.

2. Run EpsonNet WebAssist by either of the methods described below.

   ❏ Run EpsonNet WinAssist. Click the printer you want to configure from the list and click the Launch Browser button.

❏ Open your browser, and type in the IP address of the network adapter directly. Do not run EpsonNet WinAssist.

http:// *the IP address of the network adapter/*

3. Click NetBEUI under Network on the Configuration menu to view the NetBEUI setting screen.
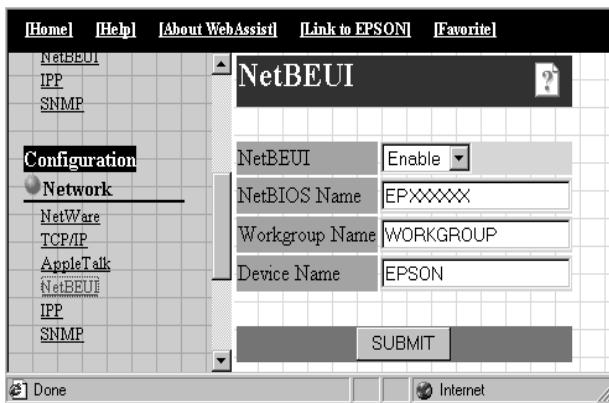
NetBEUI:
Select Enable. If Disable is on, all NetBEUI related functions will stop.

NetBIOS Name:
Enter the printer's NetBIOS name which is the computer name on the network (up to 15 characters). Be sure to use a name that is unique on the network. The default name is "EPxxxxxx" (xxxxxx are last 6 digits of the MAC Address).

Workgroup Name:
Enter the workgroup name or domain name (up to 15 characters) used for the Windows network environment.

Device Name:
Enter the printer's device name (up to 12 characters). LPT1, LPT2, LPT3, and COM cannot be used.

4. Click SUBMIT and enter the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 10-30 for more information on setting the password.

5. If the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser and do not send a job to the printer until this message appears. Follow the on-screen instructions to reset the printer.

Setting up your printer

This section explains how to set up a printer with a network adapter.

1. Click Start, point to Settings, and then click Printers.

2. Double-click Add Printer in the Printer window.

3. Click the Network Printer radio button and click Next.

4. Click the Browse button, and select the network path from the list. If you cannot browse, enter the following in the Network path or queue name box.

   the NetBIOS name of the network adapter\
   the Device name of the network adapter
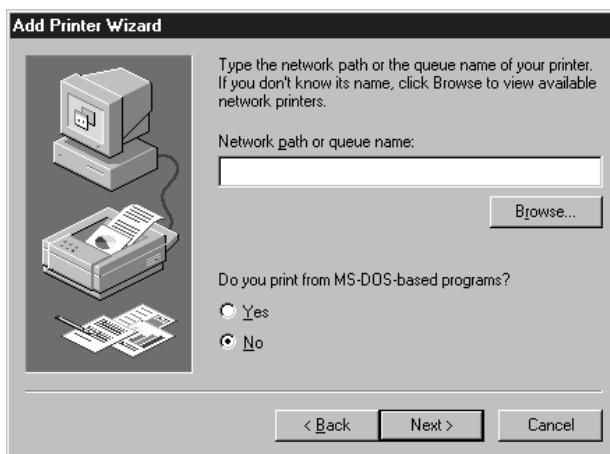
5. The Add Printer wizard appears. Follow the on-screen instructions to set up the printer.

   Note:
   If the Add Printer wizard asks you to select either Keep existing driver *or* Replace existing driver, *be sure to click the* Replace existing driver *radio button.*

Chapter 6

Settings for Windows 2000/NT

This chapter explains TCP/IP printing, NetBEUI printing in Windows 2000, Windows NT 4.0, and Windows NT 3.51, and IPP printing in Windows 2000.

Supported systems

The supported systems are as follows:

❏ Windows 2000 Server & Professional

❏ Windows NT Server & Workstation 4.0/3.51

❏ LPR port (TCP/IP)

❏ Microsoft Windows Network (NetBEUI)

❏ Internet Printing Protocol
For Windows 2000, see "Printing with IPP (Windows 2000 Only)" on page 6-18.
For Windows NT 4.0, see Chapter 13, "EpsonNet Internet Print Utility."

Printing with TCP/IP

This section explains how to set up the printer for use in a TCP/IP environment.

Note:
- ❑ *If you have not set the IP address for the network adapter, see "Setting the IP Address Using EpsonNet WinAssist/MacAssist" on page 3-2 for instructions.*

- ❑ *Be sure that the TCP/IP protocol is installed in your computer. See "Installing TCP/IP Protocols on Your PC" on page A-1 for instructions.*

Printing via Standard TCP/IP Port Monitor in Windows 2000

When using the printer on a TCP/IP network in Windows 2000, follow the steps below to connect the network printer to your computer using Standard TCP/IP Port Monitor.

Setting up your printer

1. Make sure the printer is turned on.

2. Click Start, point to Settings, and then click Printers.

3. Double-click Add Printer to start the Add Printer wizard, and then click Next.

4. Click Local printer, clear the Automatically detect my printer check box, and then click Next.
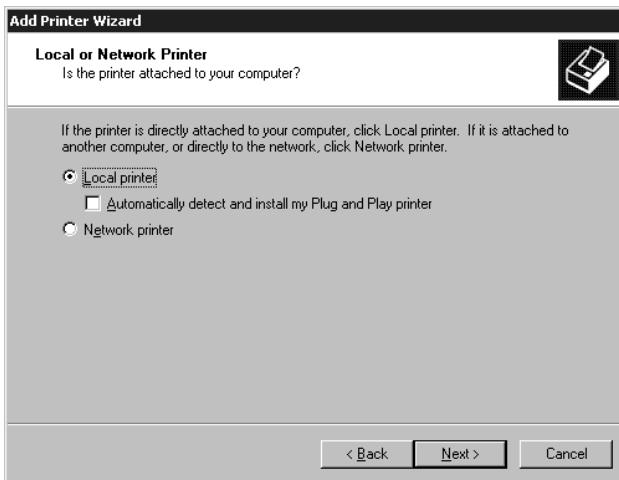
5. Click the Create a new port radio button, and then select Standard TCP/IP Port from the list. Then click Next.
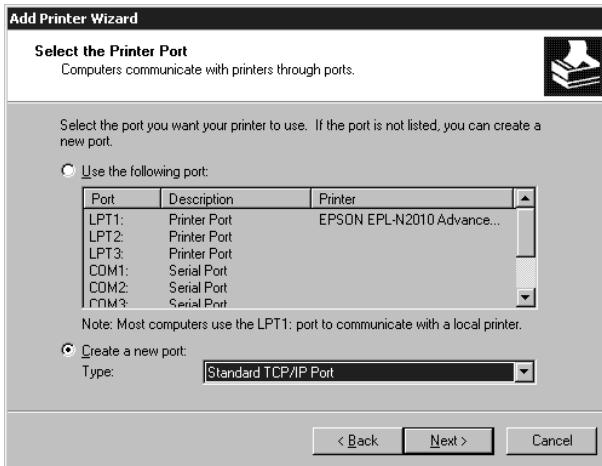
6. Enter the IP address of the network adapter and click Next.
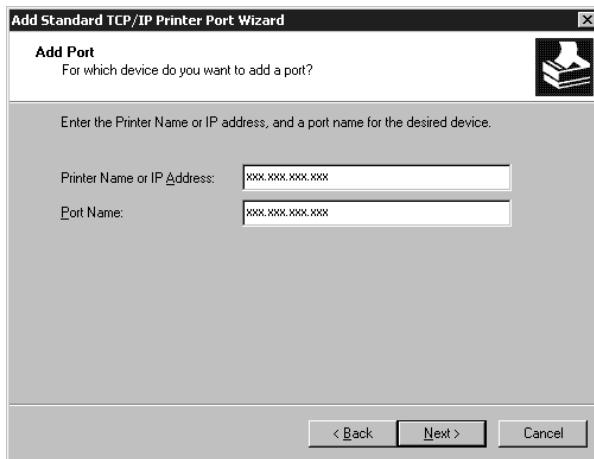
7. If an error occurs, the following dialog box appears. Click the Standard radio button and then select EPSON Network Printer.
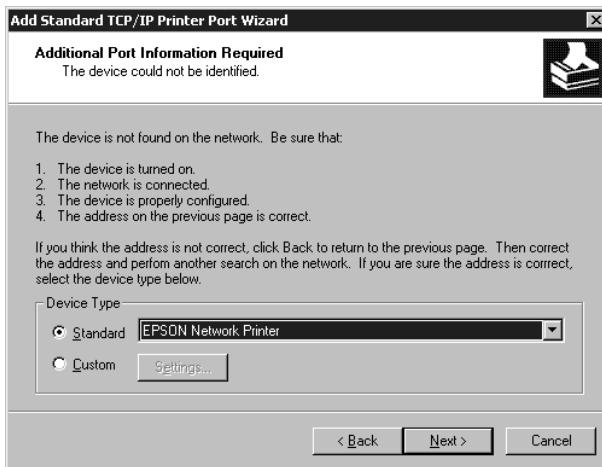
8. Follow the on-screen instructions to finish setting up the printer.

Printing via LPR port in Windows NT 4.0

When using the printer on a TCP/IP network in Windows NT 4.0, follow the steps below to connect the network printer to your computer using the LPR port.

Setting up your printer

1. Make sure the printer is turned on.

2. Click Start, point to Settings, and then click Printers.

3. Double-click the Add Printers icon, and click the My Computer radio button, then click Next.

4. Click Add Port in the Add Printer wizard dialog box.

5. Select LPR Port from the Available Printer Port list, and click New Port.

   Note:
   You cannot use the Lexmark TCP/IP Network Port *with this network adapter.*

6. Enter the IP address of the network adapter in the first text. Click OK to return to the Printer Ports dialog box.
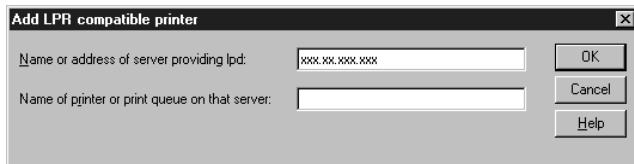
7. Follow the on-screen instructions to install the printer driver.

   Note:
   If the Add Printer wizard asks you to select either Keep existing driver *or* Replace existing driver, *be sure to click the* Replace existing driver *radio button.*

Printing via LPR port in Windows NT 3.51

When using the printer on a TCP/IP network in Windows NT 3.51, follow the steps below to connect the network printer to your computer using the LPR port.

Setting up your printer

Note:
You must install the correct printer drivers before starting.

1. Make sure the printer is turned on.

2. Select Create Printer from the Printer menu of the Print Manager.

3. Enter the printer name, and select the printer driver.

4. If you want to use the printer on a network, select the Share this printer on the network check box, and enter the Share Name and the Location.
   Share Name: Enter the shared printer name.
   Location: Since it is treated as a comment, it is not necessary to enter a location.
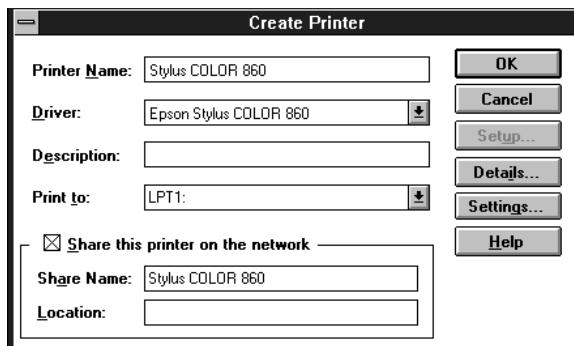
5. Select Other from the Print to pull-down menu.

6. In the Print Destinations dialog box, select LPR Port from the Available Print Monitors list and click OK.
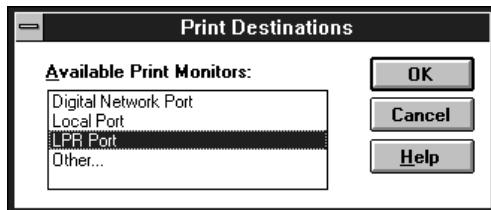
7. In the Add LPR Compatible Printer dialog box, enter the IP address of the network adapter and the name of the printer, and click OK.
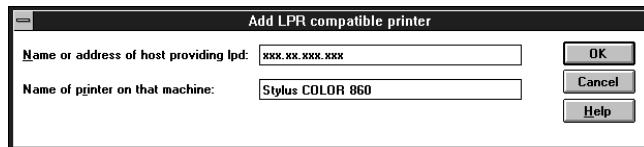
8. If the Print to box shows "IP address: printer name" in the Create Printer dialog box, the setting is complete.
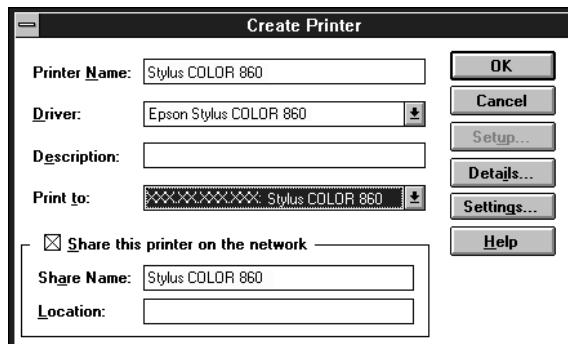
Note:
Since your clients need to know the share name of the printer in order to use it, you need to announce the share name to your clients.

Change the type of access of the spool directory

You need to change the access rights of the spool directory when you create a shared printer on Windows NT 3.51 Server with NTFS file system.

1. Start the File Manager and point to \WINNT35\SYSTEM32\SPOOL\PRINTERS.

2. Select Permissions from the Security menu.

3. Change the type of access of Everyone to ADD & READ (RWX)(RX), and click OK.
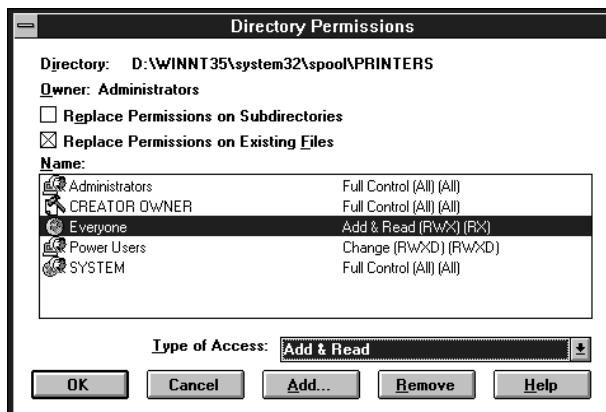
Printing with NetBEUI

This section explains how to configure the network adapter for NetBEUI using EpsonNet WinAssist or WebAssist.

Note:
To print with NetBEUI from Windows 2000, the NetBEUI protocol and Client for Microsoft Networks must be installed; and to print with NetBEUI from Windows NT 4.0/3.51, NetBEUI protocol and Workstation must be installed on your computer. See "Installing the NetBEUI Protocol" on page A-10 for instructions.

Configuring for NetBEUI using EpsonNet WinAssist

You can use the network adapter with the default settings for NetBEUI. If you want to change the default settings, use EpsonNet WinAssist or WebAssist. The default values for NetBEUI are as follows;

Items	Default values
NetBIOS name	EPxxxxxx
Workgroup name	WORKGROUP
Device name	EPSON

To configure the network adapter for NetBEUI, follow the steps below.

Note:
❏ *TCP/IP or IPX must be installed on your computer.*

❏ *Before following the steps below, you must have set the IP address for the network adapter or logged in to the NetWare server's NDS context as an ADMIN.*

1. Turn on the printer with the network adapter.

2. Start EpsonNet WinAssist.

    Windows 2000/NT 4.0: Click Start, point to Programs, EpsonNet WinAssist, then click EpsonNet WinAssist.

    Windows NT 3.51: Double-click the EpsonNet WinAssist icon in the EpsonNet WinAssist group.

3. Select the printer you want to configure from the list, then click Configuration or double-click the printer.
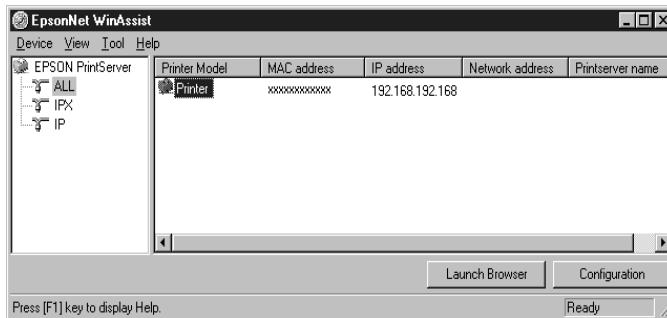
Note:

❏ *If you have connected more than one printer to the network, you can distinguish between the printers by the MAC address on the status sheet.*

❏ *If the IP address is set to the default IP address, the printer model may not appear.*

❏ *You can search printers in other segments by setting the Search Options in the Tool menu of EpsonNet WinAssist. See "Optional settings" on page 10-4 for more information.*

4. Click the NetBEUI tab, and make the following settings.
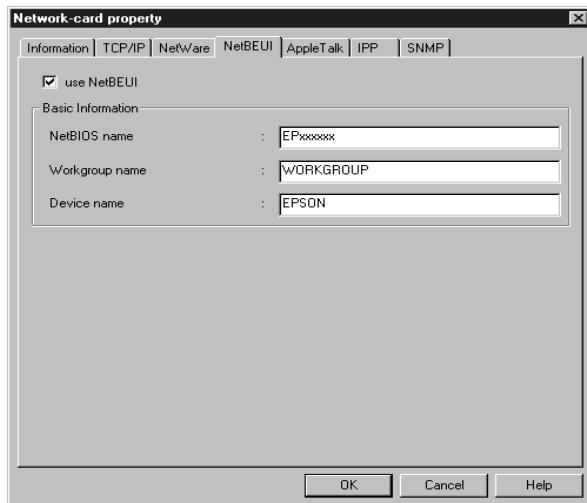
use NetBEUI:
Check this box when using NetBEUI. This check box is dimmed when the NetBEUI protocol is not supported with the network adapter.

NetBIOS name:
Enter the printer's NetBIOS name which is the computer name on the network (up to 15 characters). Be sure to use a name that is unique on the network. The default name is "EPxxxxxx" (xxxxxx are last 6 digits of the MAC Address).

Workgroup name:
Enter the workgroup name or domain name (up to 15 characters) used for the Windows network environment.

Device name:
Enter the printer's device name (up to 12 characters). LPT1, LPT2, LPT3, and COM cannot be used.

5. After making the settings, click OK. The Password dialog box appears.

6. Enter your password (up to 20 characters) and click OK to save the settings. If you are entering a password for the first time, click Change and set a password. For more information about passwords, see "About passwords" on page 10-7.

   Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

> *Caution:*
> *Since it takes 2 or 3 minutes to send new settings to the network adapter, you must wait until the on-screen message appears before turning off your printer.*

Configuring for NetBEUI using EpsonNet WebAssist

You can configure the network adapter for NetBEUI using EpsonNet WebAssist.

Note:
❏ *A web browser must be installed in your computer.*

❏ *TCP/IP must be correctly set for the computer and network adapter.*

❏ *Do not operate EpsonNet WinAssist and EpsonNet WebAssist for the printer at the same time.*

❏ *There are some restrictions on the characters you can use depending on your browser. For details, see your browser or OS manual.*

1. Turn on the printer with the network adapter.

2. Run EpsonNet WebAssist by either of the methods described below.

   ❏ Run EpsonNet WinAssist. Click the printer you want to configure from the list and click Launch Browser.

   ❏ Open your browser, and type in the IP address of the network adapter directly. Do not run EpsonNet WinAssist.

   http:///*the IP address of the network adapter/*

3. Click NetBEUI under Network on the Configuration menu to view the NetBEUI setting screen.

NetBEUI:
Select Enable. If Disable is on, all NetBEUI related functions stop.

NetBIOS Name:
Enter the printer's NetBIOS name which is the computer name on the network (up to 15 characters). Be sure to give a name that is unique on the network. The default name is "EPxxxxxx" (xxxxxx are last 6 digits of the MAC Address).

Workgroup Name:
Enter the workgroup name or domain name (up to 15 characters) used for the Windows network environment.

Device Name:
Enter the printer's device name (up to 12 characters). LPT1, LPT2, LPT3, and COM cannot be used.

4. Click SUBMIT and enter the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 10-30 for information on setting the password.

5. If the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser and do not send a job to the printer until this message appears. Then, follow the on-screen instructions to reset the printer.

[Home]   [Help]   [About WebAssist]   [Link to EPSON]   [Favorite]

Configuration change is complete!

To enable changes,

press RESET or turn printer off and on.

RESET

Internet zone

Setting up your printer

This section explains how to set up a printer.

Windows 2000

1. Click Start, point to Settings, and then click Printers.

2. Double-click Add Printer to start the Add Printer wizard, and then click Next.

3. Select the Network printer radio button and click Next.

4. Select the Type the printer name, or click Next to browse for a printer radio button.

5. Enter the following in the Name box or click Next to browse for a printer.

   *the NetBIOS name of the network adapter**the Device name of the network adapter*

6. Follow the on-screen instructions to set up the printer.

Windows NT 4.0

1. Click Start, point to Settings, and then click Printers.

2. Double-click Add Printer.

3. Click the Network printer server radio button and click Next. The Connect to Printer dialog box appears.

4. Select the printer you want to configure from the Shared Printers list. If you cannot select the printer, enter the following in the Printer box:

   *the NetBIOS name of the network adapter**the Device name of the network adapter*

5. Follow the on-screen instructions to set up the printer.

Windows NT 3.51

1. Double-click Print Manager from the Main dialog box, and select Connect to Printer from the Printer menu.

2. Select the printer you want to configure from the Shared Printers list and click OK. If you cannot select the printer, enter the following in the Printer box:

    *the NetBIOS name of the network adapter**the Device name of the network adapter*

3. Follow the on-screen instructions to set up the printer.

Using the NET USE command

If you are using a Windows NT server and using NetBEUI to connect with the network adapter, we recommend that you use the NET USE command, as outlined below:

1. Check that the following services are installed.

    For Windows 2000:
    Double-click Network and Dial-up Connections in Control Panels and right-click the Local Area Connections icon and select Properties. Check that Client for Microsoft Networks is in the Components list.

    For Windows NT 4.0:
    Double-click Network in Control Panels and check that Server or Workstation is listed in the Services menu.

    For Windows NT 3.51:
    Double-click Network in Control Panels and check that Server or Workstation is listed in the Installed Network Software list.

2. Open the command prompt of Windows NT and enter the following command.

   NET USE *the printer port*:*the NetBIOS name of the network adapter\the Device name of the network adapter*

3. From the server, setup the printer as a shared printer.

4. To use the printer, clients need to select the printer port that you set in step 2.

   Windows 98/95:
   Open the target printer's properties, and select the port in the Details dialog box.

   Windows 2000/NT 4.0:
   Open the target printer's properties, and select the port in the Ports dialog box.

   Windows NT 3.51:
   Select the printer in the Print Manager, and select the properties from the Printer menu. From the Print to list box, select the target port.

Printing with IPP (Windows 2000 Only)

This section explains about printing with Internet Printing Protocol (IPP) in Windows 2000. First, you need to set the IPP URL of the printer with EpsonNet Win Assist or WebAssist. Then set up the printer with Add Printer Wizard.

Configuring for IPP using EpsonNet WinAssist

1. Turn on the printer with the network adapter.

2. Run EpsonNet WinAssist from the Start menu.

3. Select the printer you want to configure from the list, then click Configuration or double-click the printer.

Note:

❏ *If you have connected more than one printer to the network, you can distinguish between the printers by the MAC address on a status sheet.*

❏ *If the IP address is set to the default IP address, the printer model may not appear.*

❏ *You can search printers in other segments by setting the Search Options in the Tool menu in EpsonNet WinAssist. See "Optional settings" on page 10-4 for more information.*

4. Click the IPP tab, and make the following settings.

IPP URL:
Displays the IPP URL of the printer.
   http://*the IP address of the printer***:631/***the printer name*

Printer Name:
Enter the printer name to use with the IPP printing up to 127 characters.

Location:
Enter the name of the location where the printer is physically located up to 64 characters.

5. After making the settings, click OK. The Password dialog box appears.

6. Enter your password (up to 20 characters) and click OK to save settings. If you are entering a password for the first time, click Change and set the password. For more information about passwords, see "About passwords" on page 10-7.

Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

> **Caution:**
> *Since it takes 2 or 3 minutes to send new settings to the network adapter, you must wait until the on-screen message appears before turning off your printer.*

Configuring for IPP using EpsonNet WebAssist

You can also configure the network adapter for IPP using EpsonNet WebAssist.

Note:
❏ *A web browser must be installed in your computer.*

❏ *TCP/IP must be correctly set for the computer and network adapter.*

❏ *Do not operate EpsonNet WinAssist and EpsonNet WebAssist for the printer at the same time.*

❏ *There are some restrictions on the characters you can use depending on your browser. For details, see your browser or OS manual.*

1. Turn on the printer with the network adapter.

2. Run EpsonNet WebAssist by either of the methods described below.

   ❏ Run EpsonNet WinAssist. Click the printer you want to configure from the list and click Launch Browser.

   ❏ Open your browser, and type in the IP address of the network adapter directly. Do not run EpsonNet WinAssist.

      http:// *the IP address of the network adapter/*

3. Click IPP under Network on the Configuration menu to view the IPP setting screen.
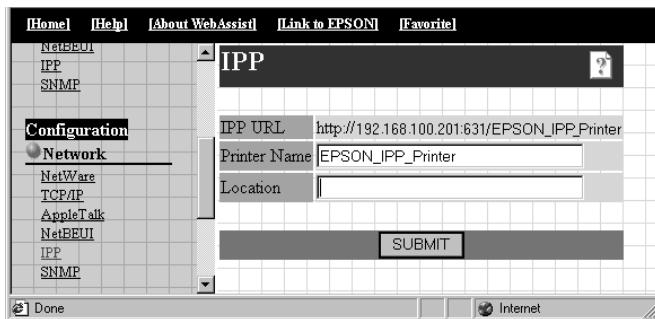
IPP URL:
Displays the IPP URL of the printer.
   http:// *the IP address of the printer:***631/** *the printer name*

Printer Name:
Enter the printer name to use with the IPP printing up to 127 characters.

Location:
Enter the name of the location where the printer is physically located up to 64 characters.

4. Click SUBMIT and enter the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 10-30 for information on setting the password.

5. If the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser and do not send a job to the printer until this message appears. Then, follow the on-screen instructions to reset the printer.

Setting up your printer

1. Click Start, point to Settings, and then click Printers.

2. Double-click Add Printer to start the Add Printer wizard, and then click Next.

3. Click the Network printer radio button and click Next.

4. Select the Connect to a printer on the Internet or on your intranet radio button.

5. Enter the URL of the target printer using the format below. The URL should be same as the URL you set in the EpsonNet WebAssist's IPP configuration page.

   http://*the IP address of the printer*:**631**/*the printer name*

   Example: **http://192.168.100.201:631/EPSON_IPP_Printer**

6. Follow the on-screen instructions to install the printer driver.

Chapter 7

Settings for Macintosh

This chapter explains how to configure the network adapter for TCP/IP or AppleTalk in a Macintosh environment using EpsonNet MacAssist or WinAssist.

Supported systems

The supported systems are as follows:

❏ Macintosh OS
System 7.5.x
Mac OS 7.6.x, 8.x. 9.x

❏ Apple network driver
AppleTalk Driver 58.x (EtherTalk Phase II)
OpenTransport 1.0.8, 1.1 or later (EtherTalk Phase II)

❏ Apple LaserWriter 8 printer driver

❏ EPSON printer driver

❏ EPSONScript driver
EPSONScript Driver, EPSONScript Utility

Note:
When using a Macintosh with a network adapter, do not use EPSON Namer. Use EpsonNet WinAssist/MacAssist/WebAssist to change the printer name.

Configuring for AppleTalk Using EpsonNet MacAssist

Use EpsonNet MacAssist to configure the network adapter as described below.

1. Turn on the printer with the network adapter.

2. Double-click the EpsonNet MacAssist icon.

3. Highlight the printer you want to configure from the list and click Configuration.
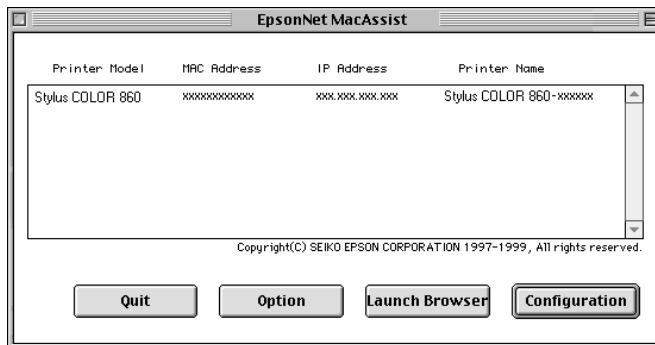
Note:

❏ *If you have connected more than one printer to the network, you can distinguish between the printers by the MAC address on a status sheet.*

❏ *You can search printers in other zones just like a computer by changing the Zone setting in the Option dialog box. See "EpsonNet MacAssist dialog box" on page 10-18 for more information.*

4. The IP Address Configuration and the AppleTalk Configuration dialog box appears.
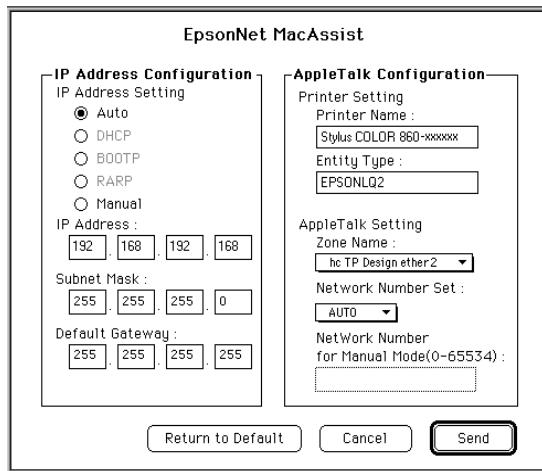
Note:
See "Setting the IP Address Using EpsonNet WinAssist/ MacAssist" on page 3-2 for more information about setting the IP address.

5. Set the following options in the AppleTalk Configuration box.

Printer Name:
Enter the printer name (up to 32 characters). The default name is shown below.
Level 1 printer: Epson-xxxxxx
Level 2 or 3 printer: Printer product name-xxxxxx
   (xxxxxx is a substitute for the last 6 digits of the MAC
    address)

Entity Type:
Enter EPSONLQ2 to set the entity type to match the printer driver with the printer.

Zone Name:
Select the network zone in which you want the printer to appear.

Network Number Set:
Select either Auto or Manual. Auto is usually preferred.

Network Number for Manual Mode:
Type a value between 0 and 65534 when Manual is selected for Network Number Set.

6. After making settings, click Send. The Password dialog box appears.

7. Enter your password (up to 20 characters) and click OK to save settings. If you are entering a password for the first time, click Change and set the password. For more information about passwords, see "About passwords" on page 10-19.

   After updating is complete, refresh the configuration. To do this, quit and restart EpsonNet MacAssist.

   Caution:
   Since it takes 2 or 3 minutes to send new settings to the Internal Print Server, you must wait until the on-screen message appears to turn off your printer.

Configuring for AppleTalk Using EpsonNet WinAssist

If you want to configure the network adapter using EpsonNet WinAssist from a Windows environment, follow the steps below.

Note:
Before following the steps below, you must have set the IP address for the network adapter or logged in to the NetWare server's NDS context as ADMIN.

1. Turn on the printer with the network adapter.

2. Start EpsonNet WinAssist.

   Windows 98/95/2000/NT 4.0: Click Start, point to Programs, EpsonNet WinAssist, then click EpsonNet WinAssist.

   Windows NT 3.51: Double-click the EpsonNet WinAssist icon in the EpsonNet WinAssist group.

3. Select the printer you want to configure from the list, then click Configuration or double-click the printer.

Note:
- *If you have connected more than one printer to the network, you can distinguish between the printers by the MAC address on the status sheet.*

- *If the IP address is set to the default IP address, the printer model may not appear.*

- *You can search printers in other segments by changing the Search Options in the Tool menu. See "Optional settings" on page 10-4 for more information.*

4. Click the AppleTalk tab, and make the following settings.
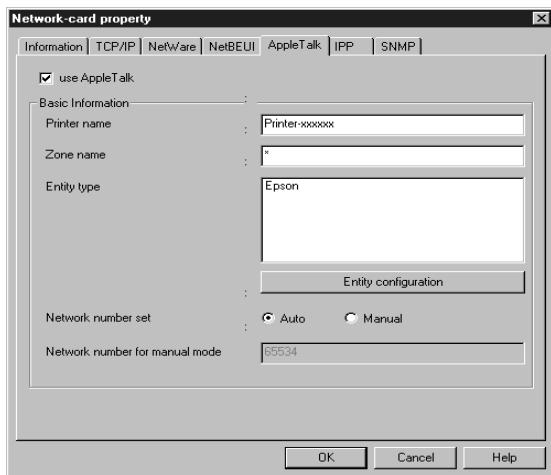
use AppleTalk:
Select this check box when using AppleTalk. This check box is unavailable when the AppleTalk protocol is not supported with the network adapter.

Printer name:
Enter the printer name (up to 32 characters). The default name is shown below.
Level 1 printer: Epson-xxxxxx
Level 2 or 3 printer: Printer product name-xxxxxx
    (xxxxxx is a substitute for the last 6 digits of the MAC
    address)

Zone name:
Enter the network zone (up to 32 characters) in which you want the printer to appear. To have the zone selected automatically, select Auto as the Network number set option and enter an asterisk (✻) in the Zone name text box.

Entity type:
EPSONLQ2 must be displayed. To do this, click the Entity configuration button and enter EPSONLQ2.

Entity configuration button:
Click this button and enter EPSONLQ2.

Network number set:
Select either Auto or Manual. Auto is usually preferred.

Network number for manual mode:
Type a value between 0 and 65534 when Manual is selected for the Network number setting.

5. After making the settings, click OK. The Password dialog box appears.

6. Enter your password (up to 20 characters) and click OK to save settings. If you are entering a password for the first time, click Change and set the password. For more information about passwords, see "About passwords" on page 10-7.

   Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

   Caution:
   Since it takes 2 or 3 minutes to send new settings to the network adapter, you must wait until the on-screen message appears before turning off your printer.

Configuring for AppleTalk Using EpsonNet WebAssist

You can use EpsonNet WebAssist after setting the IP address of the network adapter, as described in Chapter 3.

Note:
❏ *A web browser must be installed in your computer.*

❏ *TCP/IP is correctly set for the computer and network adapter.*

❏ *Do not operate EpsonNet WinAssist/MacAssist and EpsonNet WebAssist for the printer at the same time.*

❏ *There are some restrictions on the characters you can use depending on your browser. For details, see your browser or OS manual.*

1. Turn on the printer with the network adapter.

2. Run EpsonNet WebAssist by either way described below.

   ❏ Run EpsonNet WinAssist or EpsonNet MacAssist. Select the printer that you want to configure from the list and click Launch Browser.

   ❏ Open your browser, and type in the IP address of the network adapter directly. Do not run EpsonNet WinAssist or MacAssist.

   http://*the IP address of the network adapter*/

3. Click AppleTalk under Network on the Configuration menu to view the AppleTalk settings screen.
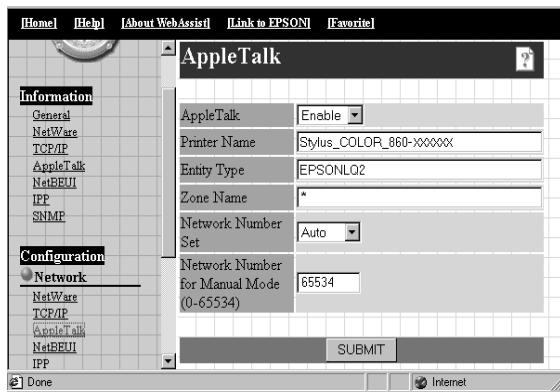
AppleTalk:
Select Enable.

Printer Name:
Enter the printer name (up to 32 characters). The default name is shown below.
Level 1 printer: Epson-xxxxxx
Level 2 or 3 printer: Printer product name-xxxxxx
   (xxxxxx is a substitute for the last 6 digits of the MAC
    address)

Entity Type:
Enter EPSONLQ2 to set the entity type to match the printer driver with the printer.

Zone Name:
Enter the network zone (up to 32 characters) in which you want the printer to appear. To have the zone selected automatically, select Auto as the Network number set option and enter an asterisk (✻) in the Zone name text box.

Network Number Set:
Select either Auto or Manual. Auto is usually preferred.

Network Number for Manual Mode:
Type a value between 0 and 65534 when Manual is selected for the Network number setting.

4. Click SUBMIT and enter the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 10-30 for more information on setting the password.

5. If the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser and do not send a job to the printer until this message appears. Then, follow the on-screen instructions to reset the printer.

Settings for OS/2

This chapter explains how to configure and use the network adapter with an IBM OS/2 System, which includes OS/2 Warp3 and 4 (OS/2 Warp Connect and OS/2 Warp Server).

Supported systems

The supported systems are as follows:

❑ OS/2 Warp3, OS/2 Warp4

❑ TCP/IP (lprportd)

❑ NetBEUI
The IBM OS/2 NetBIOS protocol must be installed.

Printing with TCP/IP

This section explains TCP/IP printing using the LPR port supported by standard OS/2.

1. Double-click the OS/2 system folder, then the System Setup folder, and then double-click the TCP/IP Configuration icon.

2. Click the Printing tab.

3. Enter the IP address of the network adapter in the Remote print server box and the name of the remote print server's printer in the second text box. Enter a value of 1 or greater in the Maximum number of LPD ports box.
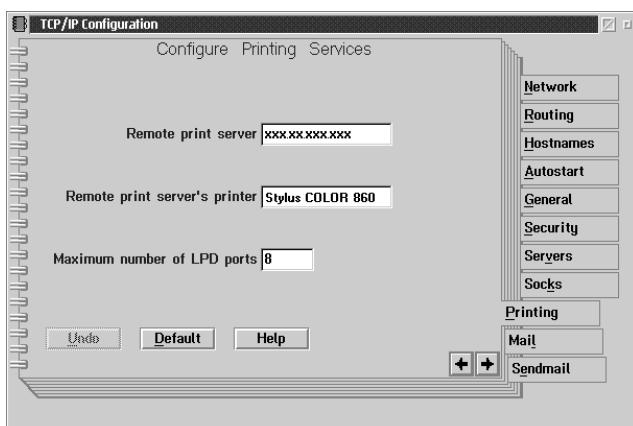
4. Click the Autostart tab.

5. Select lprportd from the Services to autostart list. Check the Autostart service check box, and click the Detached radio button.
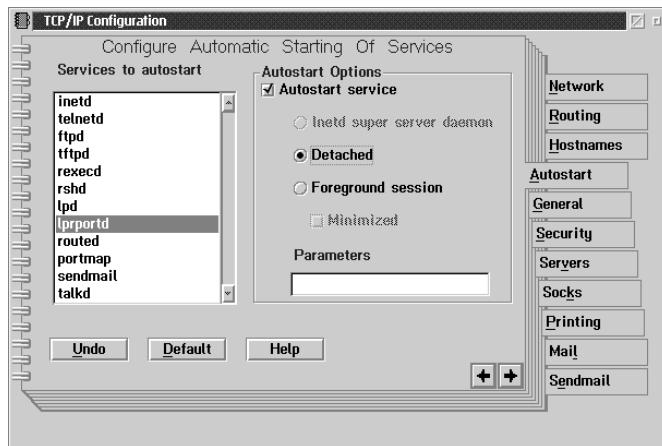
6. Save the settings you made in the TCP/IP Configuration dialog box, and restart your computer.

Setting up your printer

1. Double-click Template from the OS/2 System folder.

2. Drag Printer to your desktop to create a printer.

3. Double-click the Printer icon.

4. Select Properties from the control menu, then click the Output Port tab.
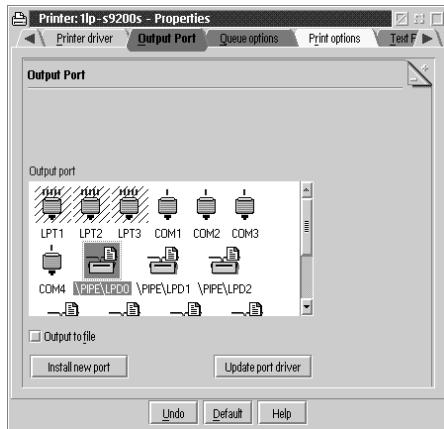
5. From the Output Port list box, select one from \PIPE\LPD0 to \PIPE\LPDn (where n is the maximum number of LPD ports). The \PIPE\LPD -Settings dialog box will appear.

6. Enter the IP address of the network adapter in the LPD server box. Enter the printer name set in step 2 in the LPD printer box.
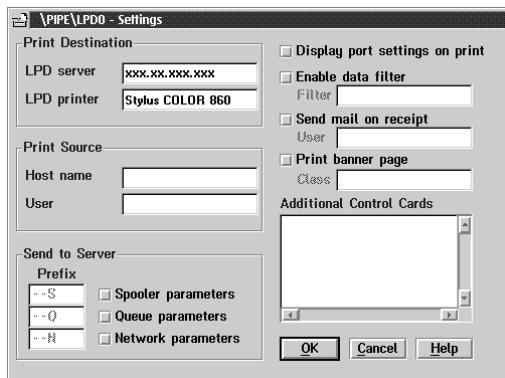
7. Close the Printer icon to exit printer configuration.

Printing with NetBEUI

To setup a printer connected with a network adapter:

1. Be sure that IBM OS/2 NetBIOS is installed on your computer.

2. To create a printer, double-click the target printer icon to open the Properties dialog box. Then click the Output Port tab.

3. Select the port.

4. Connect to the printer from the command line.

   Example: Connect the printer to LPT1.

   net use LPT1: \\ *the NetBIOS name of the network adapter* *the Device name of the network adapter*

   Note:
   To change the NetBIOS name and device name, use EpsonNet WinAssist or WebAssist running on Windows 98/95/2000/NT.

Chapter 9

Settings for UNIX

This chapter explains how to set up the printer for different UNIX systems using the lpr command.

The network adapter supports many standard UNIX commands and can be configured from a host computer without using a special setup utility.

The network adapter is able to function as a remote printer on systems using TCP/IP Ethernet transfer with lpr remote printing protocol, or standard ftp (file transfer protocol).

Note:
Because this network adapter does not convert data into the printer control language, a printer driver and filter are necessary for each system.

lpr filters

Filters for lpr are controlled by the name given to the remote printer. When setting up an lpr printer entry, a name is entered for:

❏ the local printer name to be redirected

❏ the host name of the station to which the print is sent

❏ the remote printer name (name of the printer port on the remote station)

It is this last name that the network adapter uses to determine which filters to use.

Many different remote printer names may be set up, all directed to the same network adapter remote host, and each is given a different local printer name to be redirected. Different types of print jobs may be sent to different printer names, which will then all print out on the same printer, through the same network adapter interface, but using different filters.

The remote printer name options used to invoke the different filters are as follows:

lpb	Binary files (no filters)
lpa	ASCII files (carriage returns at line ends)
lpbf	Binary file with form feed at file end
lpaf	ASCII file with form feed at file end

All other remote printer name options will be treated the same as lpb.

The following is an example of sending a text file, "txtfile", via lpr with a form feed appended:

    % lpr -plpaf txtfile

Setting Up Different UNIX Systems Using the lpr Command

The following UNIX systems can print using the standard lpr command.

    SunSoft Solaris 2.4 or later
    SunOS 4.1.4 or later
    IBM AIX 3.2.5 or later and 4.1.3 or later
    HP-UX 9.05 or later
    SCO UNIX 4.2 or later

Setting up for SunSoft Solaris 2.4 or later

In the following steps, substitute the name that your printer with the network adapter will be known by for HOSTNAME, and the name by which you want your printer to be known for Rprinter.

1. Add the IP address and printer host name to the \etc\hosts file.

   For example:
   22.33.44.55 HOSTNAME

2. Define the host name as a print server.

   For example:
   lpsystem -t bsd HOSTNAME

3. Create the printer.

   For example:
   lpadmin -p Rprinter -s HOSTNAME\aux-T unknown-1 any

4. Enable the printer for use.

   For example:
   accept Rprinter
   enable Rprinter

5. To print, use the lp command.

   For example:
   lp -d Rprinter Print-File-Name

Setting up for SunOS 4.1.4 or later

In the following steps, substitute the name that your printer with the network adapter will be known by for HOSTNAME, and the name by which you want your printer to be known for Rprinter.

1. Add the IP address and printer host name to the \etc\hosts file.

    For example:
    22.33.44.55 HOSTNAME

2. Create a spool directory.

    For example:
    mkdir\var\spool\lpd\PRIFx

3. Add the printer entry to the \etc\printcap file.

    For example:
    Rprinter |
    SC860:lp=:rm=HOSTNAME:rp=aux:sd=/var/spool/lpd/
    PRIFx

4. To print, use the lpr command.

    For example:
    lpt -s -PRPrinter Print-File-Name

> *Caution:*
> *Files that exceed 1MB may not be printed unless the -s option is used.*

Setting up for IBM AIX 3.2.5 or later and 4.1.3 or later

In the following steps, substitute the name that your printer with the network adapter will be known by for HOSTNAME, and the name by which you want your printer to be known for Rprinter.

1. Add the IP address and printer host name to the /etc/hosts file.

    For example:
    22.33.44.55 HOSTNAME

2. Run smit.

    For example:
    smit printer

3. Set the printer name (for example: Rprinter) in:

    "Manage Remote Printer"
    "Client Services"
    "Remote Printer Queues"
    "NAME of queue to add".

    Set the host name (for example: HOSTNAME) in:

    "DESTINATION HOST for remote jobs".

    Set the port name (for example: aux) in:

    "Name of QUEUE on remote printer".

4. To print, use the lpr command.

    For example:
    lpr -PRPrinter Print-File-Name

Setting up for HP-UX 9.05 or later

In the following steps, substitute the name that your printer with the network adapter will be known by for HOSTNAME, and the name by which you want your printer to be known for Rprinter.

1. Add the IP address and host name to the /etc/hosts file.

    For example:
    22.33.44.55 HOSTNAME

2. Terminate the printer service.

    For example:
    lpshut

3. Create a printer.

    For example:
    lpadmin -pRPrinter -v/dev/null -mrmodel
    -ormHOSTNAME -orpaux

4. Restart the print service.

    For example:
    lpshed

5. Enable the printer for use.

    For example:
    accept Rprinter
    enable Rprinter

6. To print, use the lp command.

    For example:
    lp -DRPrinter Print-File-Name

Setting up for SCO UNIX 4.2 or later (Open Server)

In the following steps, substitute the name that your printer with the network adapter will be known by for HOSTNAME, and the name by which you want your printer to be known for Rprinter.

1. Add the IP address and host name to the /etc/hosts file.

    For example:
    22.33.44.55 HOSTNAME

2. Execute rlpconf to register the printer.

    For example:
    rlpconf

3. Enter the name of the printer.

    For example:
    Please enter the printer name (q to quit):RPrinter

4. Specify the remote printer as the printer type.

    For example:
    Is Rprinter a remote printer or a local printer (r/l)? r

5. Enter the name of the remote printer's host.

    For example:
    Please enter the name of the remote host that
    Rprinter
    is attached to:
    HOSTNAME
    Printer RPrinter is connected to host HOSTNAME

6. Confirm that the entries are correct.

    For example:
    Is this correct?(y/n)y

7. Specify that the RLP extended function (valid when the print server is SCO-UNIX) will not be used.

   For example:
   If HOSTNAME currently runs SCO OpenServer
   Release 5 or above, it can support the extended
   remote line printer protocol. Do you want to turn
   on the "extended RLP protocol" support flag?
   If you are not sure, answer "n"? (y/n)(n)n

8. Specify whether the created printer is to become the default printer.

   For example:
   Would you like this to be the system default printer?
   (y/n)y

9. To print, use the lpr command.

   For example:
   lpr -d RPrinter Print-File-Name

Using the ftp command

ftp commands are common to all UNIX systems.

ftp programs use interfaces that are common for all unix systems.

The following is an example of printing using the ftp command (the entry operations are underlined).

ftp> open 22.33.44.55

Connected to 22.33.44.55

220 PR-Ifx(22.33.44.55) ftp server ready.

Name: _

331 Password Required for (No Name).

Password:__

230 User logged in.

200 Type set to I.

ftp> put binary file

200 PORT command successful.

150 Opening data connection for binary_file

226 Transfer complete

ftp> bye

Chapter 10

The EpsonNet Configuration Utility

This chapter explains the functions of EpsonNet WinAssist, MacAssist, and WebAssist.

EpsonNet WinAssist

This section describes the EpsonNet WinAssist dialog box.
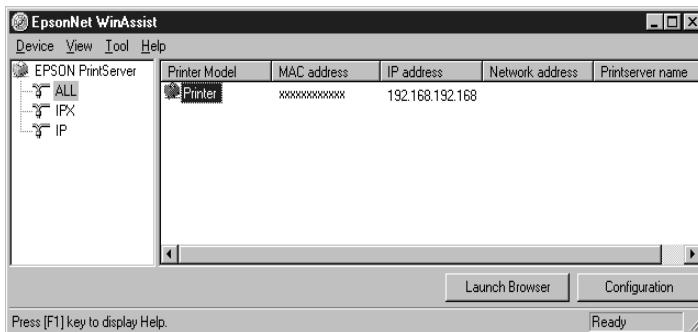
Tree View:

Three categories, ALL, IPX, and IP are available in Tree view. The default selection is ALL. When a category is selected, the network adapter information in that category is displayed in the List view. If the route "EPSON PrintServer" is selected, the category list is displayed in the List view.

List View:

The information for the network adapter in the selected category is displayed in the List view. The printer model, MAC address, IP address, network address, and print server name are displayed. When you click an item header, the list is sorted in ascending or descending order depending on the item you click.

Note:
The IPX category will be displayed only when IPX for NetWare (communication protocol) is used and logged in to the NetWare server or the NDS context with supervisor privileges.

Configuration button:

Select the printer you want to configure from the List view, and click the Configuration button to configure the network adapter.

Launch Browser button:

Select the printer you want to configure from the List view, and then click the Launch Browser button. EpsonNet WebAssist will start to configure the network adapter.

Menu bar

EpsonNet WinAssist has the following menus and sub-menus.

Device menu:

❏ Configuration
Configures the network adapter you have selected.

❏ Launch Browser
Starts EpsonNet WebAssist which allows you to configure the network adapter you have selected. EpsonNet WebAssist is a utility that runs on a browser.

❏ Close
Closes EpsonNet WinAssist.

View menu:

❏ Refresh
Updates to the latest information by searching for available printers again.

Tool menu:

❏ Timeout
Sets the time-out value. See the next section "Optional settings" for more information.

❏ Search Options
Configures the options for a search with IP or IPX. See the next section "Optional settings" for more information.

❏ Firmware update
Allows you to update the firmware and WebAssist by specifying the update file and the target print server. See "Updating the Firmware" on page 10-31 for more information.

Help menu:

❏ Help Topic
Opens EpsonNet WinAssist help.

❏ About EpsonNet WinAssist
Displays the copyright and version information for EpsonNet WinAssist.

Optional settings

This section explains the optional settings in the Tool menu. You can make Time-out and Search option settings. You need to restart EpsonNet WinAssist for settings to take effect.

Note:
See "Updating the Firmware" on page 10-31 about the Firmware Update function.

Time-out

Sets the length of time before a time-out occurs (between 2 and 120 seconds). A communication error occurs if this time is exceeded. The default value is 6 seconds.
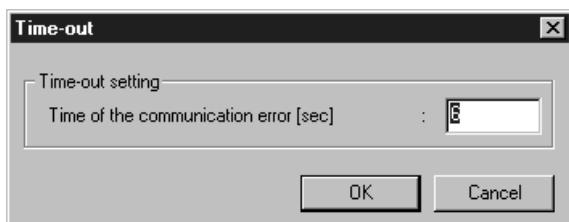
Search Options-IP

To search for network adapters in other segments, use the Search Options-IP of EpsonNet WinAssist.
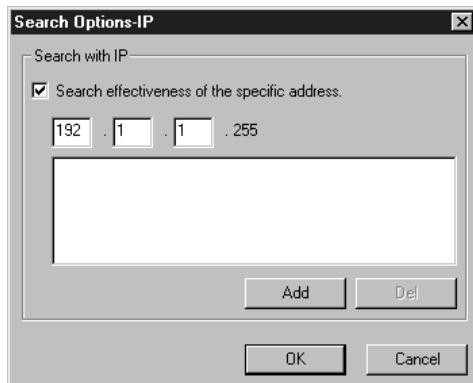
Item	Explanation
Search effectiveness of the specific address	Search for a network adapter that is beyond the router by enabling this function.
Text box	Enter the IP address (valid range 0 to 255) of the network adapter you want to find. Enter the IP address as follows: Class A: the value.255.255.255 Class B: the value. the value.255.255 Class C: the value. the value.the value.255
List box	Displays the IP addresses that have been registered.
Add button	Registers IP addresses (up to 20 addresses). Do not add the local address.
Delete button	Deletes an IP address from the List box.
OK	Saves the settings.
Cancel	Cancels any changes.

Search Options-IPX

To search for network adapters in other network segments, use the Search Options-IPX function of EpsonNet WinAssist.

Note:
❏ *To use this option, you need to log in to the NetWare server as a supervisor.*

❏ *When using a dial-up network, delete any unnecessary address from the Select Search Address list to prevent charges for extra accounts.*
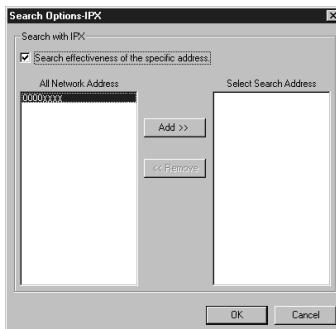
Item	Explanation
Search effectiveness of the specific address	Display time can be reduced by selecting this check box and choosing the target networks, so that unnecessary or unwanted information is not acquired.
All Network Address	Displays all current network addresses.
Select Search Address	Displays the network address to be searched.
Add button	Select an address in All Network Address, then click Add to add an address to Select Search Address (up to 256 address).
Remove button	Removes an address from the Select Search Address list.
OK	Saves the settings.
Cancel	Cancels any changes.

Setting menus

About passwords

A password is required to configure the network adapter. When you click OK in the setting dialog box or click the Return to default button, the Password dialog box appears.

1. To set a password or to change the current password, click Change.

```
┌─────────────────────────────────────────────┐
│ Password                                  ⊠ │
│ ┌─Login Printserver──────────────────────┐  │
│ │                                         │  │
│ │ Input the current administrator password.  │
│ │                                         │  │
│ │ Password                                │  │
│ │ ┌─────────────────────────────────────┐ │  │
│ │ │                                     │ │  │
│ │ └─────────────────────────────────────┘ │  │
│ │                                         │  │
│ │   ┌──────┐   ┌────────┐   ┌────────┐    │  │
│ │   │  OK  │   │ Cancel │   │ Change │    │  │
│ │   └──────┘   └────────┘   └────────┘    │  │
│ └─────────────────────────────────────────┘  │
└─────────────────────────────────────────────┘
```

2. In the Administrator password dialog box, enter a password (up to 20 characters) and click OK. Passwords are case sensitive.

   Note:
   ❏ *The same password is used for EpsonNet WinAssist, MacAssist, and WebAssist.*

   ❏ *Since the new password becomes effective after sending the data to the network adapter, enter the old password immediately after changing the password.*

   ❏ *If you forget your password, you need to initialize the network adapter. See "Initializing the Network Adapter" on page 1-6 for instructions.*

Information menu

The Information menu shows network adapter parameters.
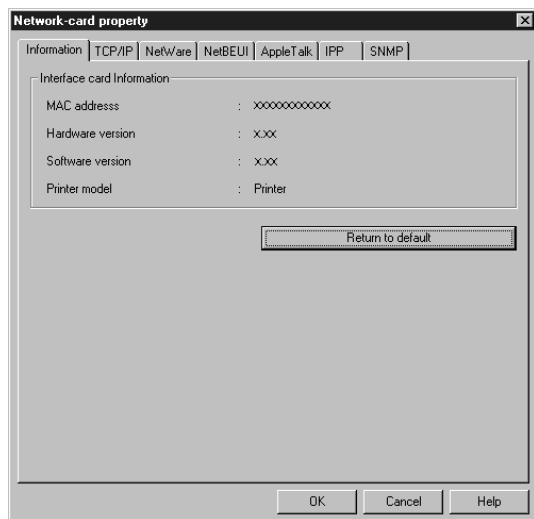
Items	Explanations
MAC address	Displays the name of network adapter. You can check the MAC address on a status sheet.
Hardware version	Displays the hardware version of the network adapter.
Software version	Displays the software version of the network adapter.
Printer model	Displays the product name of the printer.
Return to default	Resets all configuration settings of the network adapter to the default settings.
OK	Updates the settings.
Cancel	Cancels any changes.
Help	Accesses help.

TCP/IP menu

You can configure the network adapter for TCP/IP by making the necessary settings on the TCP/IP menu. See Chapter 3 for details.
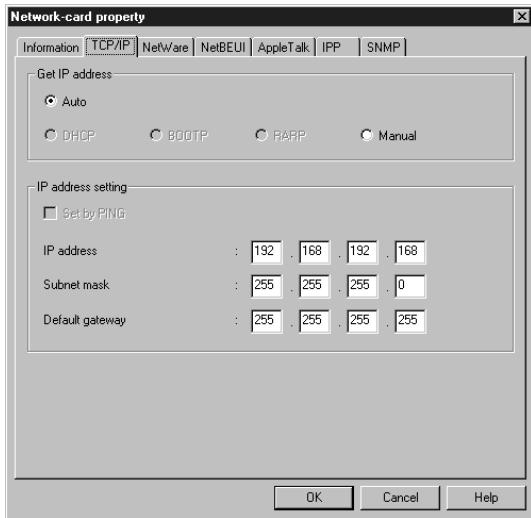
Items	Explanations
Get IP address	Select the method for acquiring IP addresses; Auto or Manual.
Set by PING	Not available.
IP address	Enter the IP address for the network adapter. Be sure that the IP address is unique and will not cause conflicts with any other device on the network.
Subnet mask	Enter the subnet mask of the IP address.
Default gateway	Enter the gateway address.
OK	Updates the settings.
Cancel	Cancels any changes.
Help	Accesses help.

NetWare - Print Server menu

You can configure the network adapter for Print Server mode by making settings on the NetWare menu. See Chapter 4 for details.
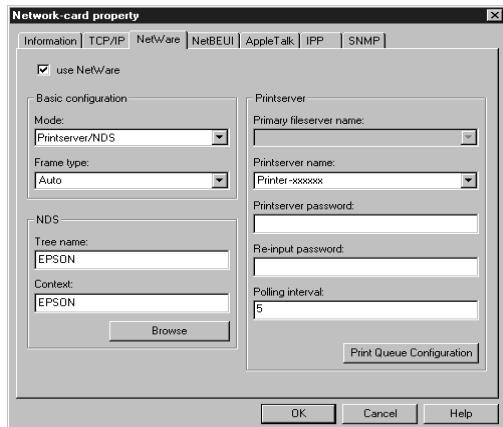
Items	Explanations
use NetWare	Select this box when using NetWare.
Mode	Select the mode.
Frame type	You must select Auto.
Tree name	Set the NDS Tree name.
Context	Set the NDS Context.
Primary file server name	Select the server where the print server logs in only if it is in bindery mode.
Print server name	Select or enter the print server name.
Print server password	Enter the password to log in to the print server.
Re-Input password	Enter the password again.
Polling interval	Set the polling interval in seconds.
Print Queue Configuration	Make print queue settings.
OK	Updates the settings.
Cancel	Cancels any changes.
Help	Accesses help.

Print Queue Configuration dialog box

The following dialog box appears when you click the Print Queue Configuration button in the Print server menu.
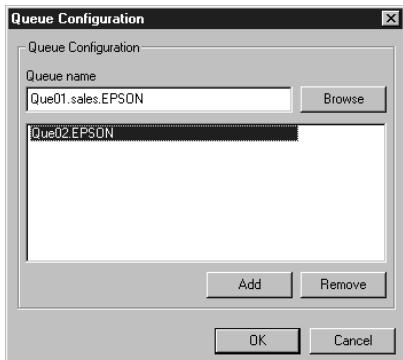
Items	Explanations
Queue name	Displays the queue name that is assigned to the print server by browsing the queue.
Browse	Click the Browse button to select a queue. You can also create or delete a queue.
Queue list box	Lists the print queues.
Add	Adds the print queue.
Remove	Removes the print queue.
OK	Updates the settings.
Cancel	Cancels any changes.

NetWare - Remote Printer menu

The following menu appears when you select Remote Printer for the mode. See Chapter 4 for details.
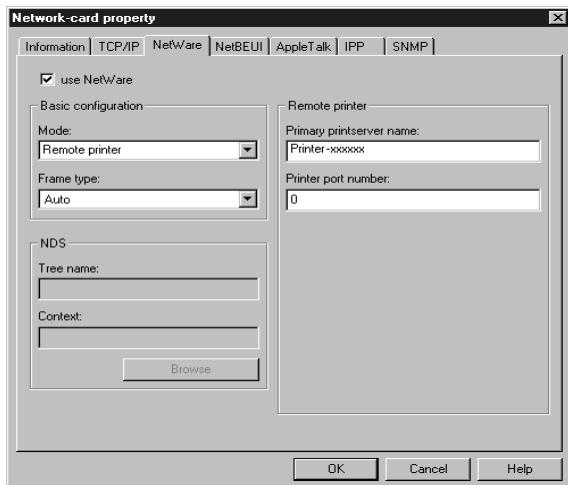
Items	Explanations
use NetWare	Select this box when using NetWare.
Mode	Select the mode.
Frame type	You must select Auto.
Tree name	Leave as is.
Context	Leave as is.
Primary print server name	Enter the primary print server name.
Printer port number	Enter the printer port number.
OK	Updates the settings.
Cancel	Cancels any changes.
Help	Accesses help.

NetBEUI menu

You can configure the network adapter for NetBEUI by making settings in the NetBEUI menu. See Chapters 5 and 6 for details.
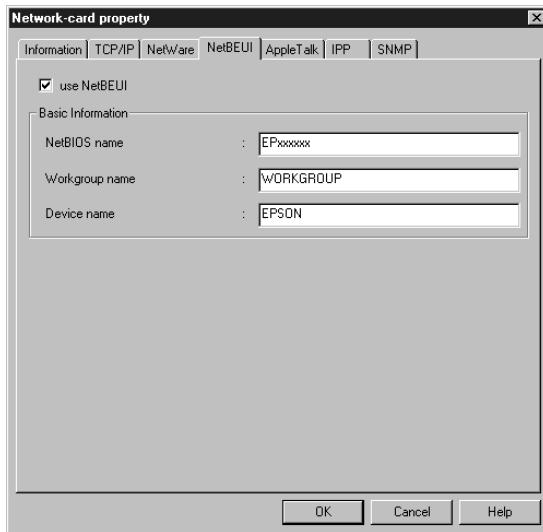

Items	Explanations
use NetBEUI	Select this box when using NetBEUI.
NetBIOS name	Enter the printer's NetBIOS name (up to 15 characters). Be sure to give a unique name that will not cause conflicts with any other device on the network.
Workgroup name	Enter the workgroup name or domain name used for the Windows network environment (up to 15 characters).
Device name	Enter the printer's device name (up to 12 characters). Do not use LPT1, LPT2, LPT3, or COM.
OK	Updates the settings.
Cancel	Cancels any changes.
Help	Accesses help.

AppleTalk menu

You can configure the network adapter for AppleTalk by making settings in the AppleTalk menu. See Chapter 7 for details.
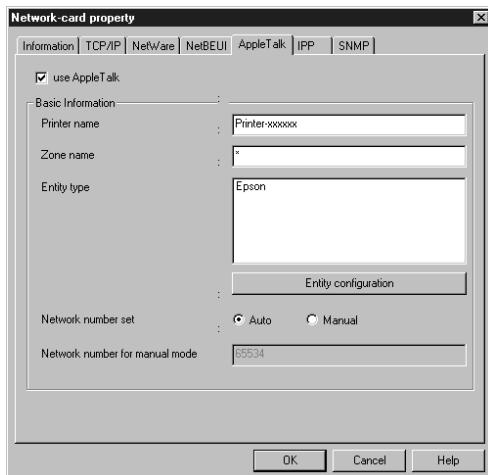
Items	Explanations
use AppleTalk	Select this box when using AppleTalk.
Printer name	Enter the name of the printer.
Zone name	Enter the network zone name.
Entity type	Displays the entity type of the printer.
Entity configuration	Enter EPSONLQ2 to set the entity type.
Network number set	Selects the method for acquiring the network number.
Network number for manual mode	Enter the network number after selecting to set the Network number manually.
OK	Updates the settings.
Cancel	Cancels any changes.
Help	Accesses help.

IPP menu

You can configure the network adapter for IPP by making settings in the IPP menu.
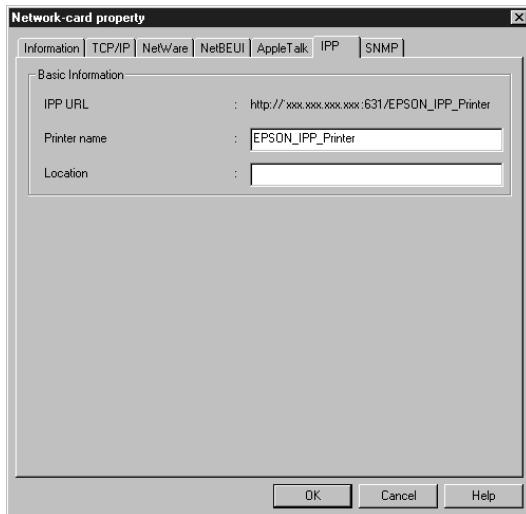
Items	Explanations
IPP URL	Displays the printer's URL for Internet Printing. *Format:* http:// the IP address of the network adapter:631/ the printer name set below *Example:* http://192.168.100.201:631/EPSON_IPP_Printer
Printer name	Enter the printer name to use for Internet Printing (up to 127 characters). *Example:* EPSON_IPP_Printer
Location	Enter the name of the printer's physical location (up to 64 characters).
OK	Updates the settings.
Cancel	Cancels any changes.
Help	Accesses help.

SNMP menu

You can configure the network adapter for SNMP by making settings in the SNMP menu.
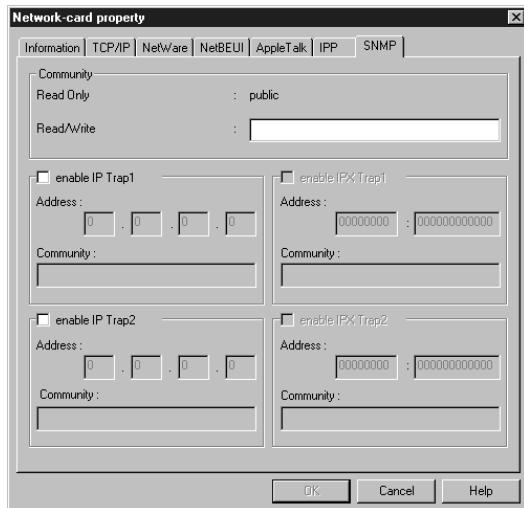
Items	Explanations
Read Only	The word "public" is always displayed.
Read/Write	Enter the Read/Write community name (up to 32 characters).
enable IP Trap 1 or/and 2	Enable or Disable the IP trap 1 or/and 2.
Address	Enter the IP address of the server to which the trap is transmitted.
Community	Enter the community name (up to 32 characters).
enable IPX Trap 1 or/and 2	Enable or Disable the IPX trap 1 or/and 2.

Items	Explanations
Address	Enter the Network Address and Node Number (MAC Address) of the server to which the trap is transmitted.
	Format: Network Address: Node Number
	Assume that the Network Address is A7E00BB0 (hexadecimal) and Node Number is 000048930000 (hexadecimal). In this case, the address is A7E00BB0:000048930000.
Community	Enter the community name (up to 32 characters).
OK	Updates the settings.
Cancel	Cancels any changes.
Help	Accesses help.

EpsonNet MacAssist

EpsonNet MacAssist dialog box

This section describes the EpsonNet MacAssist dialog box.
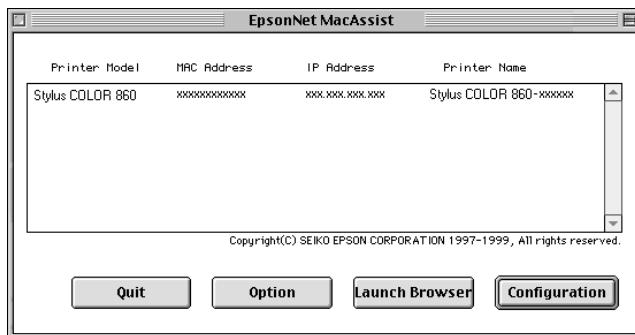
List box:

> The network adapter information is displayed in the List box.
> The information consists of the printer model, the MAC
> address, the IP address, and the print server name.

Option:

> You can set the communication time-out value used by
> EpsonNet MacAssist to between 3 and 99 seconds. The default
> value is 5 seconds.

> By clicking Select Zone, you can add a zone to search for
> network adapters in a particular zone. The network adapters
> which belong to the selected zone are displayed in the List box
> and you can change their settings. The zones acquired from
> the network environment are displayed in the Zone list. The
> zones to be searched are displayed in the Search list. The
> maximum number of zones that can be displayed in the Zone
> list and Search zone is 2000. You need to restart EpsonNet
> MacAssist for settings to take effect.

Launch Browser button:

Select the printer you want to configure, and then click the Launch Browser button. EpsonNet WebAssist will start to configure the network adapter. EpsonNet MacAssist automatically closes when the browser launches.

Configuration button:

Select the printer you want to configure, and click this button to configure the network adapter using EpsonNet MacAssist.

Quit button:

Exits EpsonNet MacAssist.

Setting menus

About passwords

The password is required to configure a network adapter. When you click OK in the setting dialog box or click the Return to default button, the Password dialog box appears.

1. To set the password or when you want to change the current password, click Change.

2. In the Administrator password dialog box, enter a password (up to 20 characters) and click OK. Passwords are case sensitive.

    Note:
    ❏ *The password is used for EpsonNet WinAssist, MacAssist, and WebAssist.*

    ❏ *Since the new password becomes effective after sending the data to the network adapter, enter the old password immediately after changing the password.*

    ❏ *If you forget your password, you need to initialize the network adapter. See "Initializing the Network Adapter" on page 1-6 for instructions.*

EpsonNet MacAssist menu

You can make the IP address settings and AppleTalk settings in the dialog below. See Setting the IP address in Chapter 3 and Chapter 7, Settings for Macintosh for more details.

```
┌──────────────────────────────────────────────┐
│            EpsonNet MacAssist                  │
│ ┌IP Address Configuration┐ ┌AppleTalk Configuration┐│
│ │ IP Address Setting     │ │ Printer Setting       ││
│ │   ◉ Auto               │ │   Printer Name :      ││
│ │   ○ DHCP               │ │   [Stylus COLOR 860-xxxxxx]││
│ │   ○ BOOTP              │ │   Entity Type :       ││
│ │   ○ RARP               │ │   [EPSONLQ2]          ││
│ │   ○ Manual             │ │                       ││
│ │ IP Address :           │ │ AppleTalk Setting     ││
│ │ [192].[168].[192].[168]│ │   Zone Name :         ││
│ │ Subnet Mask :          │ │   [hc TP Design ether2 ▼]││
│ │ [255].[255].[255].[0]  │ │   Network Number Set :││
│ │ Default Gateway :      │ │   [AUTO  ▼]           ││
│ │ [255].[255].[255].[255]│ │   NetWork Number      ││
│ │                        │ │   for Manual Mode(0-65534) :││
│ │                        │ │   [              ]    ││
│ └────────────────────────┘ └───────────────────────┘│
│        [Return to Default] [Cancel] [Send]      │
└──────────────────────────────────────────────┘
```

IP Address Configuration:

Items	Explanations
IP Address Setting	Select the method of acquiring an IP address.
IP Address	Enter the IP address for the network adapter.
Subnet Mask	Enter the subnet mask of the IP address.
Default Gateway	Enter the gateway.

AppleTalk Configuration:

Items	Explanations
Printer Name	Enter the name of the printer attached to the network adapter.
Entity Type	Displays the entity type of the printer. Enter EPSONLQ2 to set the entity type for the printer.
Zone Name	Select the Zone for AppleTalk.
Network Number Set	Specify the setting method for the AppleTalk network number.
Network Number for Manual Mode	Enter the network number.
Return to Default	Resets all configuration settings of the network adapter to the default settings.
Send	Updates the settings.
Cancel	Cancel any changes.

EpsonNet WebAssist

This section describes the functions of EpsonNet WebAssist.

Opening screen

Any user can access the following screen by typing the IP address of the network adapter for the URL in your browser.
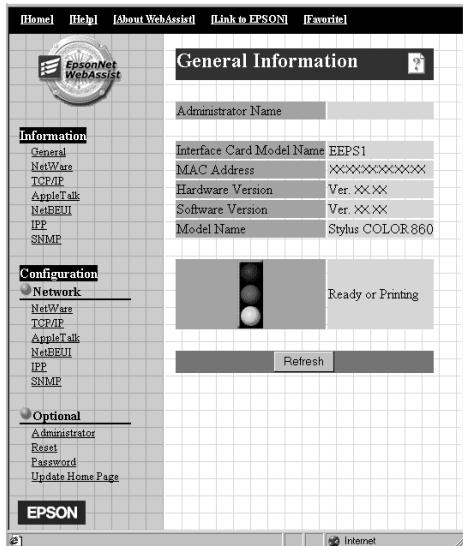
Index

Home	Links to the opening screen.
Help	Links to Help.
About WebAssist	Links to the copyright and version information for EpsonNet WebAssist.
Link to EPSON	Links to the EPSON Web site.
Favorite	Links to a web site previously defined by the administrator.

Menu

Information

General	Displays the network adapter information.
NetWare	Displays information about NetWare.
TCP/IP	Displays information about TCP/IP.
AppleTalk	Displays information about AppleTalk.
NetBEUI	Displays information about NetBEUI.
IPP	Displays information about IPP.
SNMP	Displays information about SNMP.

Configuration - Network

NetWare	Configure the applicable settings for NetWare.
TCP/IP	Configure the desired settings/method for TCP/IP.
AppleTalk	Configure the desired settings for AppleTalk.
NetBEUI	Configure the desired settings for NetBEUI.
IPP	Configure the desired settings for IPP.
SNMP	Configure the desired settings for SNMP.

Configuration - Optional

Administrator	Enter the name of the administrator and a link to a favorite Web site.
Reset	Resets the network adapter and returns to the default settings.
Password	Set the password to protects settings.
Update Home Page	Update EpsonNet WebAssist.
EPSON logo	Links to the EPSON Web site.

Information screens

The General information screen contains the basic information of the network adapter and the current printer status.

General information

Items	Explanations
Administrator Name	The administrator of the network adapter.
Interface Card Model Name	The model of the network adapter.
MAC Address	The address of the network adapter. You can distinguish the network adapter by its MAC Address.
Hardware Version	The hardware version of the network adapter.
Software Version	The software version of the network adapter.
Model Name	Shows the model name of the attached printer.
Status	A signal shows the status level. The green light is on when the printer is idle or printing. The yellow light is on when the paper, toner, or ink are low. The red light is on when the printer has no paper, no toner, or no ink, if paper is jammed, the cover is open, or an error has occurred.
Refresh button	Refreshes the printer status.

Note:
❏ *The printer status is not updated automatically. Press the* Refresh *button to display the latest printer information.*

❏ *See "Configuration screens" on page 10-25 about NetWare, TCP/IP, AppleTalk, NetBEUI, IPP, and SNMP information screens.*

Configuration screens

NetWare

NetWare Basic Configuration

Items	Explanations
NetWare	Enable or Disable NetWare.
Frame Type	Auto is displayed for the frame type.
Mode	Select the appropriate NetWare mode.
NDS Tree Name	Enter the NDS tree name (up to 31 characters) if the mode is NDS Print Server.
NDS Context	Enter the NDS context (up to 255 characters) if the mode is NDS Print Server.

Print Server Mode

Items	Explanations
Primary File Server Name	If the mode is Bindery Print Server, enter the file server name (up to 47 characters) which the print server logs in.
Print Server Name	Enter the print server name (up to 47 characters).
Polling Interval	Enter the polling interval in seconds.
NetWare Password	Enter the password (up to 20 characters) you use when you log in to the print server, if necessary.

Remote Printer Mode

Items	Explanations
Primary Print Server Name	Enter the primary print server name (up to 47 characters).
Printer Port Number	Enter the printer port number.
SUBMIT button	Saves any changes.

TCP/IP

Items	Explanations
Get IP Address	Select the method of acquiring the IP address, either Auto or Manual. When Auto is selected, DHCP is available. To use the DHCP server, it must be installed in your computer and must be correctly configured. See your operating system's online help for detailed instructions.
	To set the IP address manually, select Manual.
IP Address	Enter the IP address for the network adapter if set to Manual. Be sure to give an IP address which does not conflict with any other device on the network.
Subnet Mask	Set the subnet mask.
Default Gateway	Set the gateway address if needed.
SUBMIT button	Saves any changes.

AppleTalk

Items	Explanations
AppleTalk	Enable or Disable AppleTalk.
Printer Name	Enter the name of the printer attached to the network adapter (up to 32 characters).
Entity Type	Displays the entity type of the printer. Enter EPSONLQ2 to set the entity type for the printer.
Zone Name	The zone is automatically selected when you enter "✱" for the Zone Name and select Auto for the Network Number Set.
Network Number Set	Select Auto or Manual. Usually Auto is recommended.
Network Number for Manual Mode	Enter the network number when you select to set the Network Number manually.
SUBMIT button	Saves any changes.

NetBEUI

Items	Explanations
NetBEUI	Enable or Disable NetBEUI.
NetBIOS Name	Enter the printer's NetBIOS name which is the computer name on the network (up to 15 characters). Be sure to give a name that is unique on the network.
Workgroup Name	Enter the workgroup name or domain name (up to 15 characters).
Device Name	Enter the device name (up to 12 characters). LPT1, LPT2, or LPT3, or COM cannot be used.
SUBMIT button	Saves any changes.

IPP

You must make the following settings before setting up the printer for Internet Printing in Windows 2000 or using EpsonNet Internet Print in Windows 98/95/NT 4.0. See Chapter 13 for more information about EpsonNet Internet Print.

Items	Explanations
IPP URL	Displays the printer's URL for Internet Printing. *Format:* http:// the IP address of the printer:631/ the printer name set below *Example:* http://192.168.100.201:631/ EPSON_IPP_Printer
Printer Name	Enter the printer name to use for Internet Printing (up to 127 characters). *Example:* EPSON_IPP_Printer
Location	Enter the name of the printer's physical location (up to 64 characters).
SUBMIT button	Saves any changes.

SNMP

Community

Items	Explanations
Community	Displays the community name.
Read Only	The word "public" is always displayed.
Read/Write	Enter the Read/Write community name (up to 32 characters).
SUBMIT button	Saves any changes.

IP Trap

Items	Explanations
Trap	Enable or Disable the trap.
Address	Enter the IP address of the server to which the trap is transmitted.
Community Name	Enter the community name (up to 32 characters).
SUBMIT button	Saves any changes.

IPX Trap

Items	Explanations
Trap	Enable or Disable the trap.
Address	Enter the Network Address and Node Number (MAC Address) of the server to which the trap is transmitted. Format: Network Address: Node Number. Assume that the Network Address is A7E00BB0 (hexadecimal) and Node Number is 000048930000 (hexadecimal). In this case, the address is A7E00BB0:000048930000.
Community Name	Enter the community name (up to 32 characters).
SUBMIT button	Saves any changes.

Optional screens

Administrator

You can link to the web site specified in this screen when you click Favorite (the name is changeable) in the Index.

Items	Explanations
Administrator Name	Enter the name of the administrator (up to 128 characters).
Favorite Name	Enter the link item name (up to 20 characters) which will be displayed in the Index menu.
Favorite URL	Enter a URL (up to 64 characters).
Description	Enter any comments concerning the URL above (up to 64 characters).
SUBMIT button	Saves any changes.

Note:
Links to ftp are not supported.

Reset

You can reset the network adapter or return the settings to the default values.

Items	Explanations
RESET button	Functions like turning the power off and on again. Click this button to make the changes take effect.
RETURN TO DEFAULT button	Returns the network adapter to the default settings.

Password

The password set here protects the settings. You will be asked for the password when you update or change the settings on each setting screen. Passwords are case sensitive. No password is set by default.

Items	Explanations
Old Password	Input the old password.
New Password	Input the new password (up to 20 characters).
Re-input Password	Re-input the new password.
SUBMIT button	Saves any changes.

Note:
❏ *The same password can be used for EpsonNet WinAssist, MacAssist, and WebAssist.*

❏ *If you forget your password, you need to initialize the network adapter. See "Initializing the Network Adapter" on page 1-6 for instructions.*

Update Home Page

Note:
Update the Home Page only if EpsonNet WebAssist has been corrupted.

Items	Explanations
Filename	Mount the CD-ROM included in this package, and click the Browse button to select the EPS1**E.pac file, or enter the file name with the full path.
Browse button	Click this button to browse the file.
UPDATE button	Updates to the specified file in the Filename.

Updating the Firmware

You can update the firmware and EpsonNet WebAssist by specifying the update file and the target print server. Before you update the firmware, you must first obtain and install the update file.

Note:
Use the Firmware update function only if you have problems with the current firmware and/or EpsonNet WebAssist. Contact your EPSON dealer for assistance on updating the firmware and/or EpsonNet WebAssist.

Installing the update file

Run the program to install the update file. Follow the on-screen instructions.

Updating the firmware with EpsonNet WinAssist

Follow the instructions below to update the firmware using EpsonNet WinAssist.

1. Click Start, point to Programs and then EpsonNet WinAssist, then click EpsonNet WinAssist.

2. From the Tool menu, click Firmware update. The Software version dialog box appears.
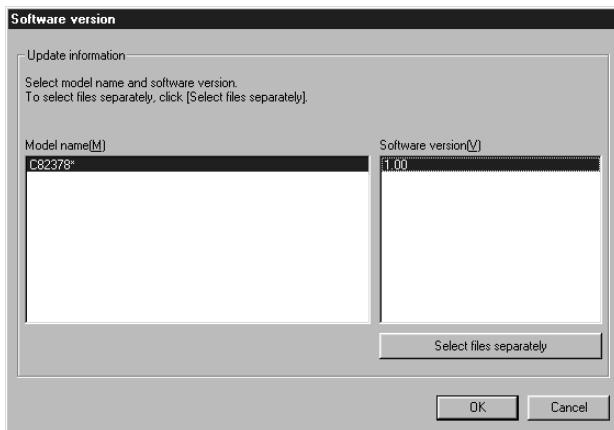

3. Select the model name and software version of the print server. Click OK.

   If you want to install from a floppy disk or from another folder on your hard drive, click Select files separately. Browse for the appropriate files for Firmware and Information page and click OK. You can specify one or both files.
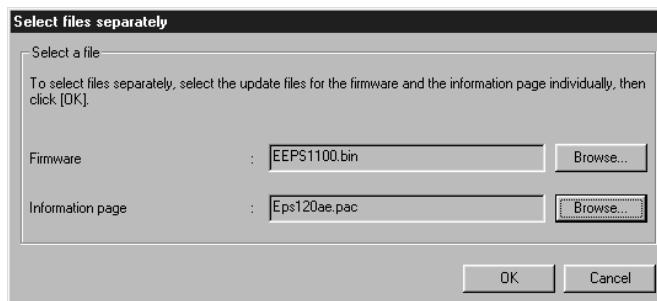
4. Select the appropriate print server from the Available print servers list and click Add.

   If the print server is in update mode, it won't be displayed in the Available print servers list. In this situation, click Select separately and enter the IP address for the print server. Click OK.
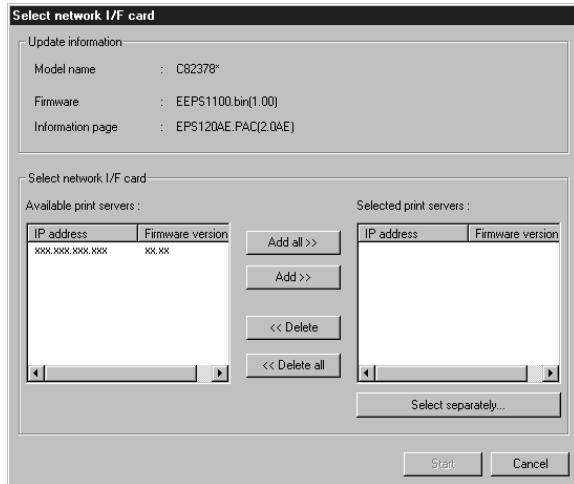
5. Click Start to update the print server. Follow the on-screen instructions.

EpsonNet Direct Print Utility

EpsonNet Direct Print is a utility program that supports TCP/IP (LPR) printing for Windows 98/95/2000/NT 4.0.

By using EpsonNet Direct Print, you can search both a printer located in the same segment and one located beyond a router. You can select from LPR standard printing, LPR extension printing, or High-speed printing.

Environment

System requirements

❏ IBM PC/AT or compatible computer that is running Windows 98/95/2000/NT 4.0

❏ Pentium 200 MHz (Pentium II or better recommended)

❏ 32MB or more of RAM

❏ 20MB or more available hard disk space

Installing EpsonNet Direct Print

Follow the steps below to install EpsonNet Direct Print. Be sure to install EpsonNet Direct Print on a computer connected to the network.

Note:
If EpsonNet Direct Print version 1 is installed on your computer, you need to uninstall it before installing EpsonNet Direct Print version 2 (the installation program will lead you through uninstalling the older version of EpsonNet Direct Print).

1. Insert the Software CD-ROM shipped with this package in the CD-ROM drive.

2. The EPSON Installation Program screen opens automatically.

    If the install screen does not appear automatically, click Start and Run. Then enter D:\EPSETUP.EXE and click OK. (Substitute the appropriate letter for your CD-ROM drive as necessary.)

3. Double-click Install EpsonNet Direct Print; or you can also install by selecting Install EpsonNet Direct Print and then clicking the arrow at the top right.

4. Follow the on-screen instructions to complete the installation.

5. Restart the computer after installation is complete.

Your computer is now set up to print with LPR via EpsonNet Direct Print. See the next section to set up your printer.

Setting Up Your Printer

When setting up a printer to print with LPR, you can add both a printer located in the same segment and one located beyond a router.

Note:
- *Be sure that the computer is connected to the network and TCP/IP is correctly set.*

- *The valid IP address other than default value "192.168.192.168" must be set; otherwise the printer does not appear under the Epson_lpr group icon. See either Chapter 2 or 3 to set the IP address.*

- *The EPSON Status Monitor 2 utility shipped with the interface card models C82362✽/C82363✽/C82364✽ with software version 1.x and EPL-N2700/N4000 printers enables EPSON TCP/IP printers. These EPSON TCP/IP printers can coexist with lpr printers added by EpsonNet Direct Print.*

- *The job control functions such as* Cancel Printing *and* Purge Print Jobs *are available when you double-click the target printer icon in the Printers folder. However, if the printer has already started printing a document, the print job may not be cancelled completely.*

Adding a printer located in the same segment

Follow the steps below to add a printer located in the same segment.

1. **Windows 98/95/NT 4.0:** Double-click the Network Neighborhood icon.

   Windows 2000: Double-click the My Network Places icon. Double-click the Entire Network icon, click entire contents, and then double-click the EpsonPeripheralNetwork icon.

2. Right-click the Epson_lpr icon and select Properties. The Epson_lpr Properties dialog box appears.

3. Select the Local Segment check box and click OK.
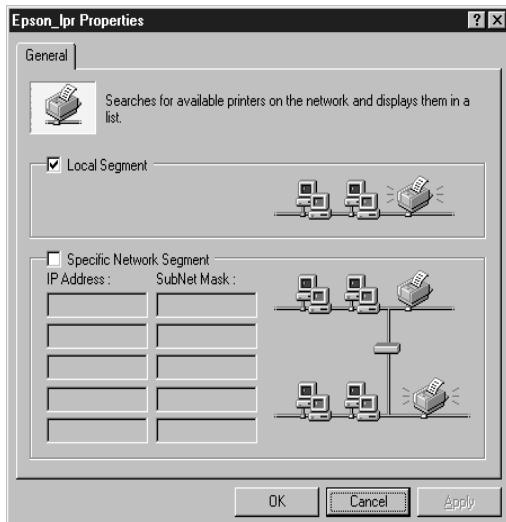
4. Double-click the Epson_lpr icon, so that available printers in the same segment as your computer appear in the screen.
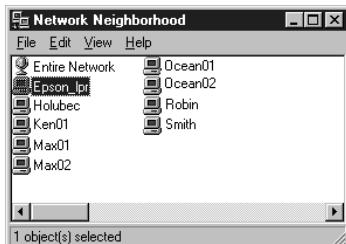
5. Double-click the target printer.
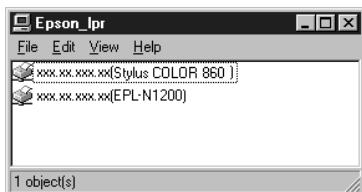
6. Follow the on-screen instructions that the Add Printer wizard gives you. If you are required to install the printer driver, follow the instructions in the user's guide that came with the printer.

Note:
If the Add Printer wizard asks you to select either Keep existing driver *or* Replace existing driver, *be sure to click the* Replace existing driver *radio button.*

Adding a printer beyond a router

Follow the steps below to add a printer beyond a router.

1. **Windows 98/95/NT 4.0:** Double-click the Network
   Neighborhood icon.

   Windows 2000: Double-click the My Network Places icon.
   Double-click the Entire Network icon, click entire contents,
   and then double-click the EpsonPeripheralNetwork icon.

2. Right-click the Epson_lpr icon and select Properties. The
   Epson_lpr Properties dialog box appears.

3. Select the Specific Network Segment check box and enter
   the IP address and subnet mask of the printer you want to
   search for. Click OK.
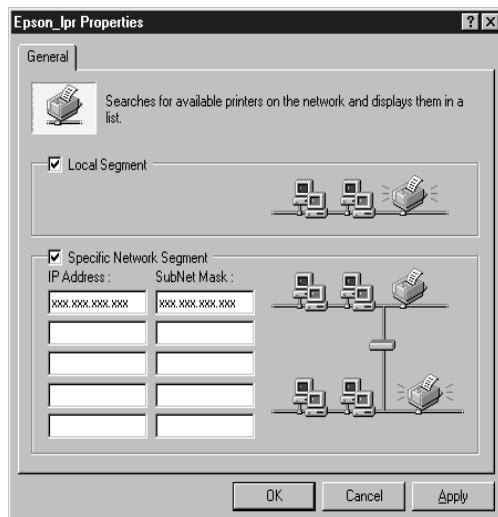
4. Double-click the Epson_lpr icon to view available printers.
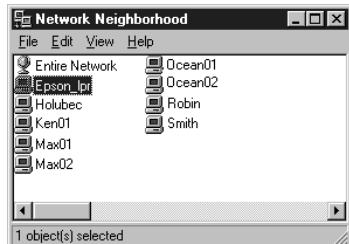
5. Double-click the target printer.
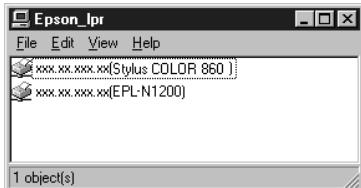
6. Follow the on-screen instructions that the Add Printer wizard gives you. If you are required to install the printer driver, follow the instructions in the user's guide that came with the printer.

   Note:
   If the Add Printer wizard asks you to select either Keep existing driver *or* Replace existing driver, *be sure to click the* Replace existing driver *radio button.*

Adding a printer from the Printers folder

Follow the steps below to add a printer from the Printers folder.

1. **Windows 98/95/NT 4.0:** Double-click the Network Neighborhood icon.

   Windows 2000: Double-click the My Network Places icon. Double-click the Entire Network icon, click entire contents, and then double-click the EpsonPeripheralNetwork icon.

2. Right-click the Epson_lpr icon and select Properties. The Epson_lpr Properties dialog box appears.

3. Select Local Segment to search a printer in the same segment, or select Specific Network Segment and enter the IP address and subnet mask of the printer to search a printer which is located beyond the router. Click OK.

4. Click Start, point to Settings, and then click Printers.

5. Double-click Add Printer in the Printers folder to start the Add Printer Wizard.

6. Select Network printer (Windows 98/95/2000) or Network print server (Windows NT 4.0) and click Next.

7. **Windows 98/95:** Click Browse and then double-click Epson_lpr.

   Windows 2000: Select the Type the printer name, or click Next to browse for a printer radio button and click Next. Double-click EpsonPeripheralNetwork.

   Windows NT 4.0: In the Shared Printers list, double-click EpsonPeripheralNetwork.

8. Select the target printer listed under Epson_lpr or EpsonPeripheralNetwork and click OK.
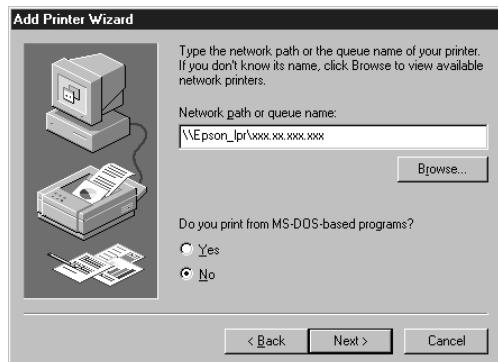
9. Follow the on-screen instructions to install the printer driver.

Note:
If the Add Printer wizard asks you to select either Keep existing driver *or* Replace existing driver, *be sure to click the* Replace existing driver *radio button.*

Configuring the Printer Port

Follow the steps in the appropriate section below to configure the printer port. The printing speed will differ depending on the selections that you make.

Windows 98/95/NT 4.0

Follow the steps below to configure the printer port.

1. Click Start, point to Settings, and then click Printers.

2. Right-click the target printer and click Properties.

3. **Windows 98/95:** Click the Details tab and then Port Settings. The EPSON LPR Port dialog box appears.

    Windows NT 4.0: Click the Ports tab and then Configure Port. The EPSON LPR Port dialog box appears.

4. Make the appropriate settings for the desired port.

   LPR standard printing:
   Select the LPR Printing check box and then the Standard Printing radio button. Print data is spooled by the computer before sending the print job to the target network printer.

   LPR enhanced printing:
   Select the LPR Printing check box and then the Enhanced Printing radio button. LPR enhanced printing sends the print job to the target network printer without spooling all of the print data. LPR enhanced printing is faster than LPR standard printing.

   High-speed printing:
   Select the High-Speed Printing radio button. High-speed printing sends the print job to the target network printer without spooling all of the print data. High-speed printing is faster than the other two printing methods. If the printer does not support this function, this check box is unavailable.

5. Select the Notify when printing completed check box if you want to receive an on-screen notification when printing is complete.

6. Click OK.

Windows 2000

Follow the steps below to configure the printer port.

1. Double-click the My Network Places icon.

2. Double-click the Entire Network icon, click entire contents, and then double-click the EpsonPeripheralNetwork icon.

3. Double-click the Epson_lpr icon.

4. Right-click the icon for the target printer and click Properties. The EPSON LPR Port dialog box appears.

5. Make the appropriate settings for the desired port.

    LPR standard printing:
    Select the LPR Printing check box and then the Standard Printing radio button. Print data is spooled by the computer before sending the print job to the target network printer.

    LPR enhanced printing:
    Select the LPR Printing check box and then the Enhanced Printing radio button. LPR enhanced printing sends the print job to the target network printer without spooling all of the print data. LPR enhanced printing is faster than LPR standard printing.

    High-speed printing:
    Select the High-Speed Printing radio button. High-speed printing sends the print job to the target network printer without spooling all of the print data. High-speed printing is faster than the other two printing methods. If the printer does not support this function, this check box is unavailable.

6. Select the Notify when printing completed check box if you want to receive an on-screen notification when printing is complete.

7. Click OK.

Uninstalling EpsonNet Direct Print

Follow the steps below to uninstall EpsonNet Direct Print.

1. Click Start, point to Settings, and then click Control Panel.

2. Double-click the Add/Remove Programs icon.

3. Select EpsonNet Direct Print and click Add/Remove (Windows 98/95/NT 4.0) or Change/Remove (Windows 2000).

4. Click Yes to uninstall EpsonNet Direct Print.

5. After the uninstall is complete, restart the computer.

Chapter 12
EPSON Status Monitor 2 (Windows only)

EPSON Status Monitor 2 is a utility program that monitors your printer and gives you information about its current status, including the amount of remaining ink or toner. If a print error occurs, the Status Monitor also provides you with a message describing the error.

For more information on using the Status Monitor, open the online help included with this utility.

Before using the Status Monitor, be sure to read the EPSON Status Monitor 2 README file located in the EPSON folder or EPSON group. This file contains the latest information on the Status Monitor.

Environment for EPSON Status Monitor 2

Protocols

The protocols that must be installed to run EPSON Status Monitor 2 vary depending on your operating system and printer type. The following table divides printers into four categories: Local printers; LPR printers, which use TCP/IP (generally in a Windows NT network environment); NetWare printers, which use Novell's IPX/SPX protocol in a NetWare environment; and Windows shared printers. Use this table to determine what protocols you need to install according to your operating system and printer type, then see the corresponding section for your operating system.

	Local Printer	LPR Printer (TCP/IP)	NetWare Printer (IPX/SPX)	Windows Shared Printers
Windows 98	LPT	EPSON LPR[1]	NetWare[3]	LPT
Windows 95	LPT	EPSON LPR[1]	NetWare[3]	LPT
Windows 2000 Windows NT4.0	LPT	TCP/IP & LPR[2]	NetWare[3]	LPR[2] & LPT
Windows NT 3.51	Not available	TCP/IP & LPR[2]	NetWare[3]	LPR[2] & LPT

EPSON LPR[1] = EpsonNet Direct Print
LPR[2] = Windows NT LPR protocol
NetWare[3] = Necessary protocols already installed

LPR printer
with the network adapter
EPSON LPR
Windows NT LPR

NetWare printer
with the network adapter
IPX/SPX protocol

NetWare server

Local printer

Windows 98/95/
2000/NT 4.0

Windows 98/95/
2000/NT 4.0/3.51

Windows 98/95/
2000/NT 4.0/3.51

Windows Shared Printer
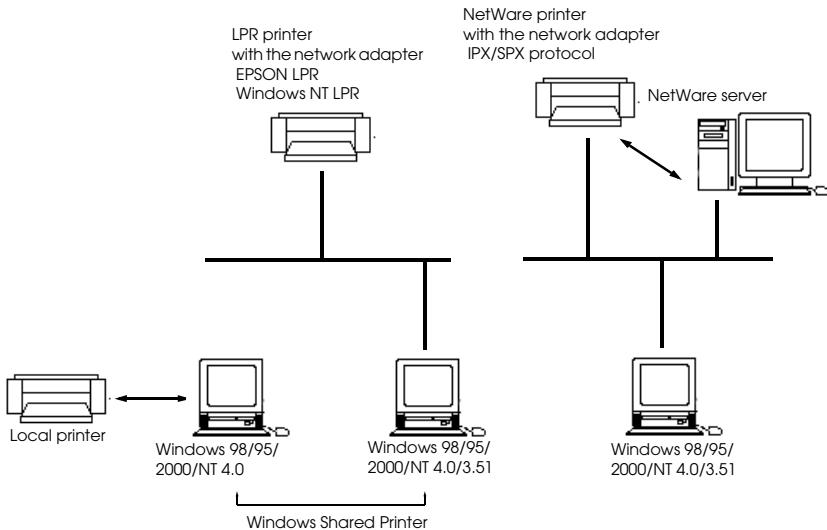
Note:
❏ *To set up the network adapter for use with TCP/IP, see Chapter 2
   or 3. To set up the network adapter for use with NetWare, see your
   NetWare documentation.*

❏ *If you have configured more than one network adapter per queue,
   Status Monitor cannot monitor the printer that is assigned to that
   queue.*

❏ *The Novell NetWare Client32 for Windows 95 or Intranet Ware
   Client for Windows NT are available.*

See the information for your printer: "Local pinter" on page 12-4,
"LPR printer" on page 12-4, "Windows shared printer" on page
12-5, and "NetWare printer" on page 12-6.

Local pinter

Connect the printer directly to the printer port of your computer.

Windows 98/95/ 2000	Windows NT 4.0	Windows NT 3.51
Bidirectionalsupport is necessary.	Do not need any special settings.	Not able to monitor.

For Windows 98/95/2000:
You need to set the bi-directional support in the printer's properties dialog box. For Windows 98/95, click the Details tab and click Spool Settings. Then click the Enable bi-directional support for this printer radio button. For Windows 2000, click the Ports tab and check the Enable bidirectional support check box.

Note:
When you monitor a local printer with Windows 98/95, use LPT1 for the printer port.

LPR printer

LPR printers use LPR over TCP/IP as their communication protocol suite, and you must install both protocols to use the Status Monitor to monitor a LPR printer. To connect to a printer on the network and share the printer without using the server:

For Windows 98/95:
You need to set the printer using EpsonNet Direct Print. See "Setting Up Your Printer" on page 11-3.

For Windows 2000/NT 4.0/NT 3.51:
You need to set up the printer for TCP/IP. See "Printing with TCP/IP" on page 6-2. The EPSON Status Monitor 2 can also monitor lpr printers added by EpsonNet Direct Print. See "Setting Up Your Printer" on page 11-3.

Windows shared printer

To monitor a shared printer from the client through the server machine, select Allow monitoring in the Windows shared printer dialog box when you install EPSON Status Monitor 2 in the server machine.

①The port used for monitoring will differ from system to system.

②The environment must support normal printing from a shared printer.

See the README file for more information about support for Windows shared printers.

	LPT1	TCP/IP-LPR
Windows 98/95	Supported	Not supported
Windows 2000/ NT 4.0/3.51	Supported	Supported

NetWare printer

You can use the network printer though the NetWare server. Make sure the following points;

❑ Connect the printer to a Bindery queue or NDS queue in Windows 98/95/2000/NT 4.0/NT 3.51.

❑ Use IntranetWare Client32 Ver1.12 or later for Windows 95. Use IntranetWare Client for Windows NT. Use the latest Novell Client for Windows 98.

❑ See the EPSON Status Monitor 2 README file for more information about NDS support.

❑ Set the port number to 0 when using Remote Printer mode.

❑ For an explanation of NetWare printer protocols, see your NetWare documentation.

If you use your printer in a NetWare environment, you need to connect to the print queue that is assigned to your printer before installing EPSON Status Monitor 2.

1. Click Start, point to Settings, and click Printers.

2. Click Add Printer.

3. Select Network printer, and click Next.

4. Double-click the NetWare file server that services the print queue assigned to your printer.

5. All of the queues serviced by that file server appear in a list. Select the correct print queue, and click OK. (If the printer driver is not installed, a dialog box appears prompting you to select the printer driver.)

6. Make the default printer setting and click Next.

7. Click Finish.

Installing EPSON Status Monitor 2

Note:
Turn off all other active applications (such as virus protection) before installing EPSON Status Monitor 2. For instructions on how to do this, see your application or Windows documentation.

Note for Windows 2000, NT 4.0, and NT 3.51:
Before starting the installation, you need to log on to the computer with Administrator rights.

1. Insert the Software CD-ROM shipped with this package in the CD-ROM drive.

2. Double-click Install EPSON Status Monitor 2.

    Note:
    If the screen shown above does not appear automatically, click Start *and* Run *(Windows 98/95/2000/NT4.0); or choose* Run *from the File menu in the Program Manager (Windows NT 3.51). Then type* D:\EPSETUP *and click* OK. *(Substitute the appropriate letter for your CD-ROM drive as necessary.)*

3. Read the on-screen instructions and click Next.

4. Click Next, or if you want to change the destination directory, click Browse and select your directory.

5. Select the type of the printer(s) you want to monitor and click Next. The printer types that you can monitor and the protocols you need to use to monitor those printer types vary from system to system.

    Windows 2000/NT 4.0

Does not appear in Windows NT 3.51

Does not appear in Windows 98/95
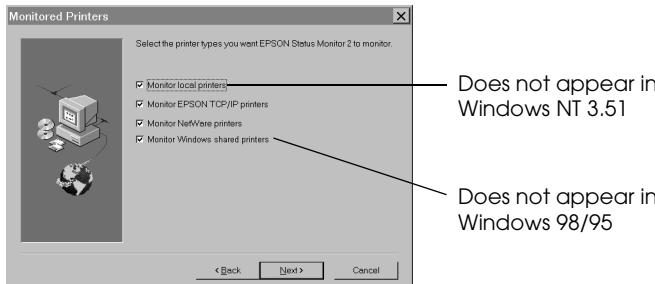
6. Select Monitor to monitor network printers that do not have drivers installed in this computer. If you are the printer administrator, select Monitor. Select Do not monitor only if network traffic is a problem. Click Next.
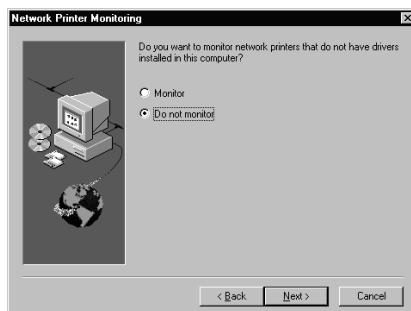
Note for Windows 2000, NT 4.0, and NT 3.51:
The screen above is available only if you have logged on as an Administrator.

7. Only for Netware network-based printers:

   In the screen shown below, set the number of hops from 0 to 15 and click Next. This option is available only if the IPX/SPX protocol is installed in your computer and you selected Monitor NetWare printers in step 5.
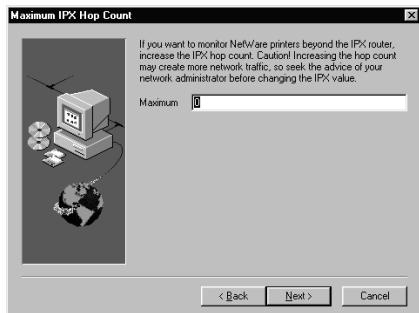
> **Caution:**
> *If you have dial-up routers in a NetWare environment, they may automatically dial up the next hop and you are likely to be charged for the line connection depending on the number of hops you set. To prevent this and to keep network traffic to a minimum, set hops carefully. For more information, see "Monitoring printers beyond routers" on page 12-32.*

8. Select Allow monitoring to monitor Windows shared printers. Select Do not allow monitoring to not monitor Windows shared printers. Click Next.

Note for Win 98/95:
The screen shown below does not appear in Windows 98/95.
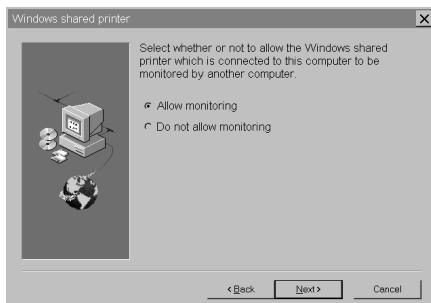
9. Check the current settings and click Next. The installation program will start installing the necessary files. Follow the on-screen instructions.

10. When the Setup Complete dialog appears, select Yes and click Finish to restart Windows.

Selecting a Printer to Monitor

Before monitoring a LPR printer with EPSON Status Monitor 2, you need to select the printer in your operating system. Follow the steps for your operating system: Windows 98/95, "Setting Up Your Printer" on page 11-3; Windows 2000, "Printing via Standard TCP/IP Port Monitor in Windows 2000" on page 6-2; NT 4.0, "Printing via LPR port in Windows NT 4.0" on page 6-5; and NT 3.51, "Printing via LPR port in Windows NT 3.51" on page 6-6.

Note:
The network adapter's IP address must be set; otherwise the printer does not appear on the screen. For instructions on setting the IP address for the network adapter, see Chapter 3, "Setting the IP Address."

Making Status Monitor Settings

You can change the settings in EPSON Status Monitor 2 as described below.

1. Open the Run dialog box from the Start menu or the Control Panel depending on your system. Enter the path to the directory where you installed the Status Monitor, followed by Setup. Then click OK.
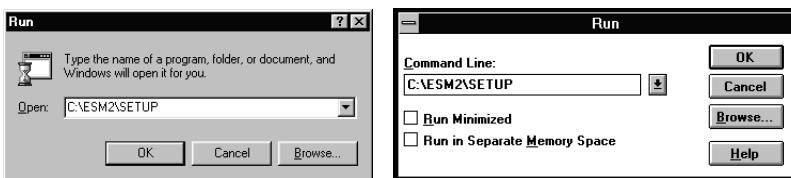
When you have installed the program in directory ESM2 of drive C, type C:\ESM2\SETUP.

Note:
If you installed the program in a directory other than ESM2, enter the path to the directory instead of ESM2. If you installed the program in drive C, type C:\(path)\SETUP. *Substitute the appropriate drive letter as necessary.*

2. Follow the on-screen instructions.

Note for Windows 2000, NT 4.0, and NT 3.51:
Users can individualize their own settings without affecting the settings of other users.

Starting EPSON Status Monitor 2

From Windows 98/95/2000/NT 4.0

Double-click the Status Monitor icon on the right side of the taskbar.

You can also start EPSON Status Monitor 2 by clicking Start, pointing to Programs and EPSON, and then clicking EPSON Status Monitor 2.

From Windows NT 3.51

Double-click the EPSON Status Monitor 2 icon on the screen.

Note:
You can also start EPSON Status Monitor 2 from the Epson program group in Program Manager.
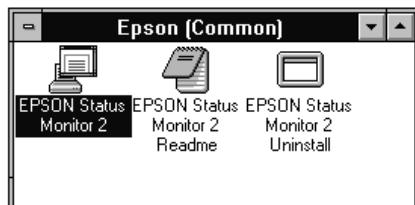
Basic Operating Procedure

This section describes the basic operation and functions of EPSON Status Monitor 2.

1. Click a printer in the EPSON Status Monitor 2 window. The Installed Printers list shows the current status of all EPSON printers that have printer drivers installed in your computer.
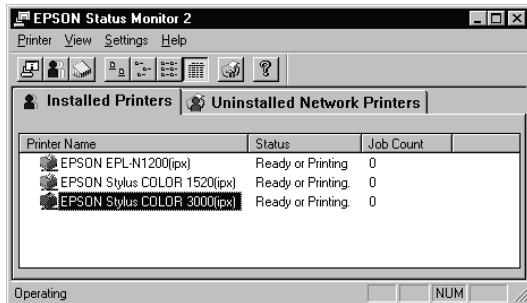
For more information about the Status Monitor window, see "Main window" on page 12-15.

2. Click the printer status icon to see detailed information about the printer, see "Main window" on page 12-15 for more information. Click the monitoring preferences icon to make settings. See "Setting monitoring preferences" on page 12-25 for more information.
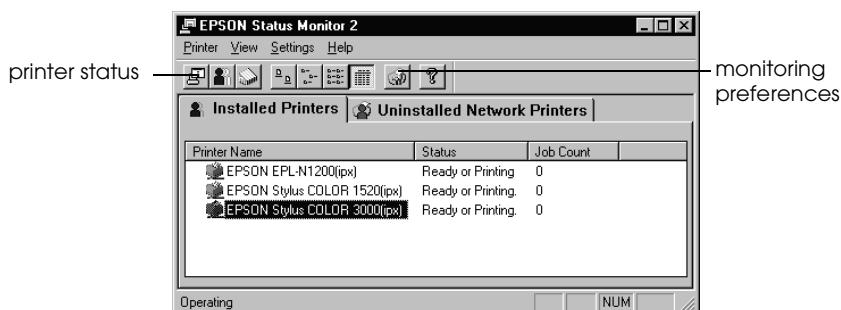
3. Click OK to close the dialog box after checking the printer status or making preference settings.
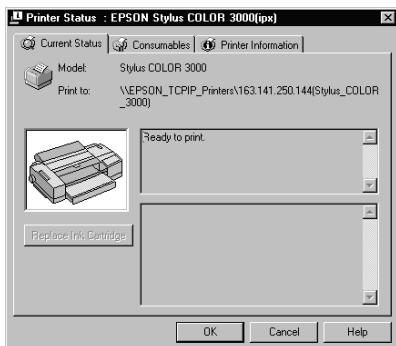

For details, see page 12-21.
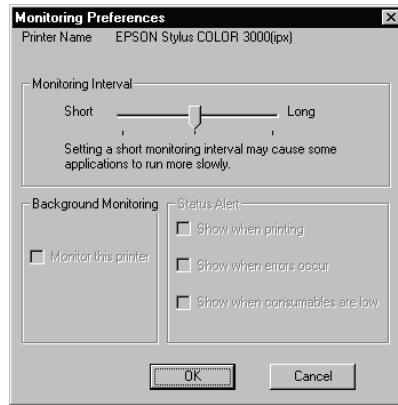
For details, see page 12-25.

Note:
If you select the Monitor this printer *check box in the Monitoring Preferences dialog box, a Status Alert message appears according to the conditions you select in the Status Alert box. For detailed information, see "Background Monitoring Icon and Status Alert" on page 12-26.*
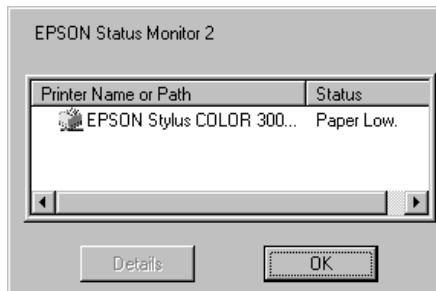
Main window

The Main window shows the current status of the printers. The color of the printer icon changes according to the printer's status.

Printer Icon:	Meaning:
Green	Ready to print.
Yellow	Ready to print; however the printer has detected something that may become a problem if it isn't fixed.
Red	Cannot print because of a problem.
Gray	Cannot monitor the printer.

Menus

Printer menu

This menu provides you with detailed information on the printer and print job status for any printer you select in the Installed Printers list. Click Printer Status for detailed information on the selected printer's status, or click Job Status to get details on jobs waiting to print. Click Select Paper Memory to open the Paper Memory Selection dialog box, where you can select a saved paper type to print on. The Select Paper Memory command is not available on some printers. Click Close to close the Status Monitor.

View menu

This menu lets you control the appearance and content of the EPSON Status Monitor 2 window and the Installed Printers list. You can choose to show or hide the toolbar and status bar, and you can choose whether large or small icons will appear next to the printers in the Installed Printers list. Clicking List on this menu displays only the printer name and icon in the Installed Printers list. Clicking Details displays the printer name, status, and job count. Click Refresh to update the status information shown in the Installed Printers list.

Settings menu

The Settings menu gives you control over the Status Monitor's background monitoring feature, and allows you to add and delete printers from the Installed Printers list. Select a printer from the Installed Printers list and click Monitoring Preferences to turn background monitoring on or off, and to adjust the monitoring preferences for the selected printer. Click Add Printer to add a new printer to the list, or click Delete Printer to delete the selected printer from the list. Point to Background Monitoring to select when to start and stop the background monitoring feature. Click Select background monitoring icon to specify the type of printer icon that is displayed on the taskbar when background monitoring is turned on.

Help menu

Choose Help Topics from this menu to view online help for EPSON Status Monitor 2. Click About to view the Status Monitor's version number and copyright information.

Toolbar

Many of the commands available on the Status Monitor menus can be accessed directly by clicking the buttons on this toolbar. If you point to a toolbar button, the corresponding menu command appears briefly on your screen, and an explanation of the button's function appears in the Status Bar at the bottom of the Status Monitor window.

Note for Windows 2000, NT 4.0, and NT 3.51:
Job Status is not available.

Note:
❏ *Close the Printer list window when not needed: the window uses computer resources if left open.*

❏ *If you change the printer port setting (*Print to the following port *or* Print to*) in the printer driver, quit EPSON Status Monitor 2 as described in "Stopping Monitoring" on page 12-28, and then restart it.*

Installed Printers list

This list displays information about the EPSON printers that are connected to your computer through the network and have printer drivers installed in your system. To change the printer information that is displayed in this list, see "View menu" on page 12-16.

Printer Name

Provides the names of the installed printers. You can add or delete printers to be monitored by choosing Add Printer or Delete Printer from the Settings menu. To save computer resources and reduce network traffic, delete printers you do not need to monitor. (Doing so does not remove the printer driver from your computer.)

Status

Displays brief messages describing the current status of the printer.

Job Count

Displays the number of print jobs waiting to be printed from a particular printer.

The number is not displayed for Windows shared printers.

Note:
You can rearrange the order of the printers in the list by clicking the Printer Name, Status, *and* Job Count *title bars.*

Uninstalled Network Printers list

The Uninstalled Network Printers list displays non-EPSON printers and EPSON printers that do not have installed printer drivers.

Note:
You need to select Monitor *in the Network Printer Monitoring dialog box during installation for the Uninstalled Network Printers list to be available.*

To monitor network printers that do not have drivers installed in your computer, add uninstalled network printers as described on the next page.

Printer Path:	Shows the network printer path.
Status:	Shows the current printer status.
Model:	Shows the model name of the network printer.
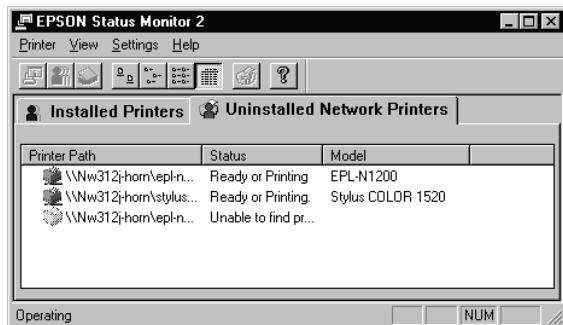
Note for Windows 2000, NT 4.0, and NT 3.51:
You need to log on as a Network Administrator to use this feature.

Note:
Delete printers that appear in this list but are not always connected to the network and printers that the Status Monitor cannot get status information about, because they unnecessarily use system resources. To delete a printer, select the printer and click Delete Printer *on the Settings menu.*

Adding uninstalled network printers

Before you start monitoring uninstalled network printers, you need to add them to the Uninstalled Network Printers list. Follow these steps:

1.   Click the Uninstalled Network Printers list.

2.   Click Add Printer on the Settings menu.

3. Enter the path or IP address of the printer. If you do not know either, click Browse to select the target printer from the network.

Note for using Browse to add a printer:
The Browse for Printer window shows the network configuration.
*Do not select printers that you cannot monitor.*

Windows 98/95
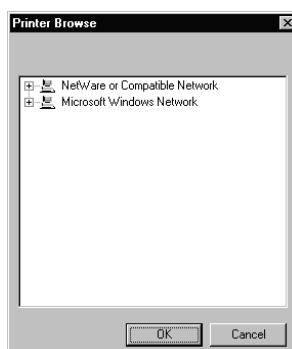
Windows 2000/NT 4.0/3.51

Getting detailed information about the printer status

To get detailed information about a printer, right-click that printer and select Printer Status, or select the printer and click Printer Status on the Printer menu. The Printer Status window appears. There are three menus in the Printer Status window, and you can switch between menus by clicking the tabs at the tops of the menus.

Current Status menu

You can check the status of the selected printer on the Current Status menu. If a problem occurs, the most likely solution appears in the Troubleshooting Message box.


This screen capture shows the Stylus Color 1520.
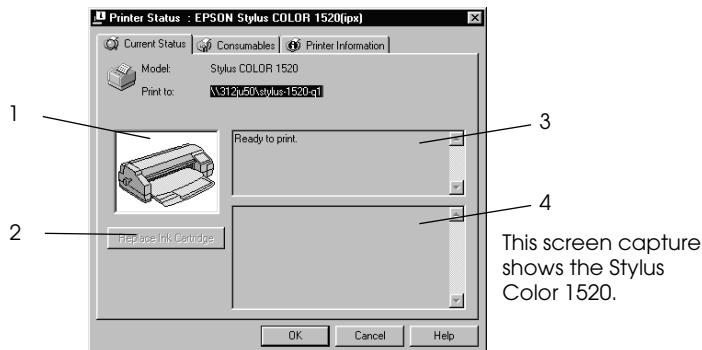
1. Image icon:	Shows the printer status graphically.
2. Replace Ink Cartridge button:	Explains how to replace an empty ink cartridge. Follow the instructions on the screen.
3. Current Status Message box:	Explains the current status of the selected printer.
4. Troubleshooting Message box:	Explains how to solve problems that may occur. If following the instructions does not solve the problem, see the troubleshooting section for the affected printer.

Consumables menu
(EPSON Stylus COLOR/EPSON Stylus Photo Series)

The information given on the Consumables menu varies according to the printer you are monitoring.
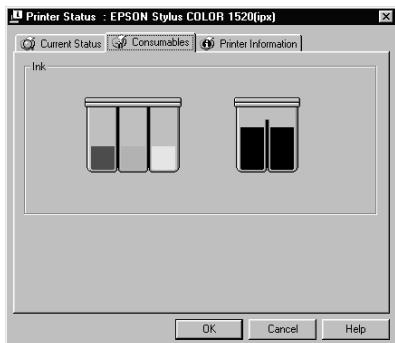
The Consumables menu for the EPSON Stylus COLOR 1520.
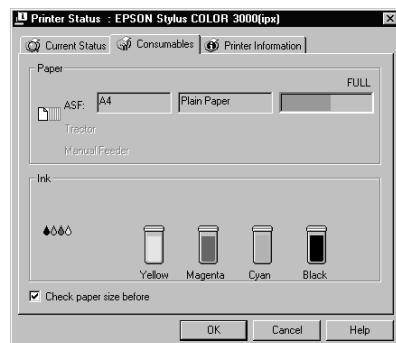
The Consumables menu for the EPSON Stylus COLOR 3000.

|	
Remaining color ink:	Shows the amount of color ink remaining.
Remaining black ink:	Shows the amount of black ink remaining.
Remaining paper:	Shows the approximate amount of remaining paper. This feature is available only on some printers.
Check paper size before:	Defines whether the paper size is checked before printing. This feature is not available on all printers.

Consumables menu (EPL Series)

The information given on the Consumables menu varies according to the printer you are monitoring.
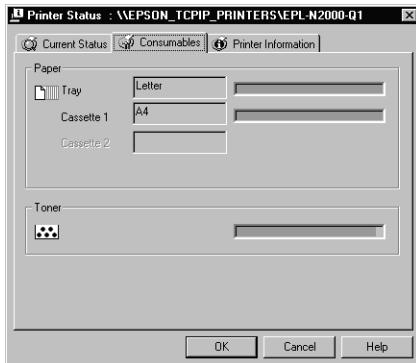
Remaining paper:	Shows the paper size and approximate amount of remaining paper in each paper source.
Remaining toner:	Shows the amount of toner remaining.

Printer Information menu

The Printer Information menu provides you with information about the selected printer and its options.
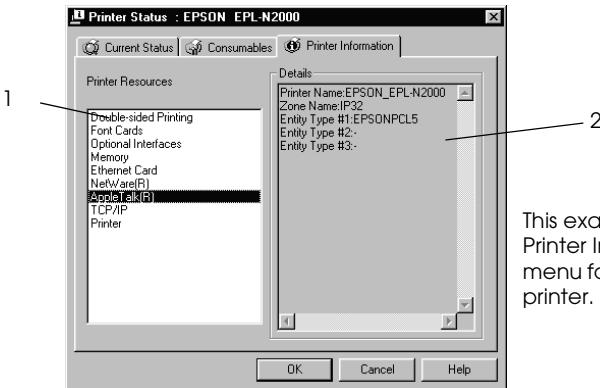
This example shows the Printer Information menu for the EPL-N2000 printer.

List:

1. Printer Resources:	Provides information about the printer and the print server.
2. Details:	Provides details about the item selected in the Printer Resources list.

Setting monitoring preferences

To make specific monitoring settings, right-click a printer and
select Monitoring Preferences, or select the printer and click
Monitoring Preferences on the Settings menu. The Monitoring
Preferences window appears.

Note for Windows 2000, NT 4.0, and NT 3.51:
Monitoring Preferences settings made from one computer do not affect
the settings made from another computer.
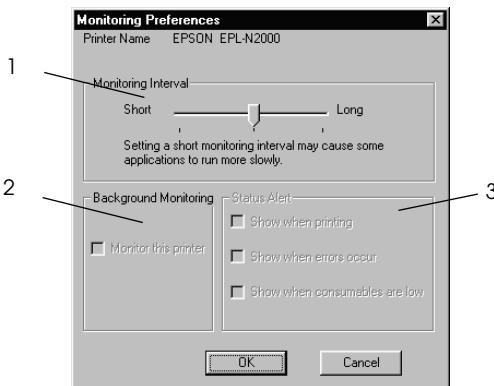
Settings:

1. Monitoring Interval:	Determines how often the Status Monitor checks for new printer status information, from short (every 2 seconds) to long (every 60 seconds). The default setting is 10 seconds.
2. Background Monitoring:	Select the Monitor this printer check box to monitor the selected printer. A check in the check box means the selected printer is being monitored.
3. Status Alert:	Determines under what conditions the Status Alert window will open. See "Status Alert" on page 12-27.

Background Monitoring Icon and Status Alert

When you click and select the Monitor this printer check box in the Monitoring Preferences dialog box, EPSON Status Monitor 2 monitors the selected printer. The background monitoring icon changes its color according to the printer's status, and the Status Alert window opens according to the conditions you select in the Monitoring Preferences dialog box.

Background monitoring icon

A printer-shaped background monitoring icon appears on the taskbar after you install EPSON Status Monitor 2.

Double-clicking the background monitoring icon opens the EPSON Status Monitor 2 window. Right-clicking this icon opens a pop-up menu where you can choose to have the Status Alert displayed in front of other windows on the desktop. This pop-up menu also allows you to turn off the background monitoring feature.

The background monitoring icon changes its color according to the printer status:

| Printer Icon:	Meaning:
Green	Ready to print.
Yellow	Ready to print; however the printer has detected something that may become a problem if it isn't fixed.
Red	Cannot print because of a problem.
Gray	Cannot monitor the printer.

Status Alert

The Status Alert window opens above the background monitoring icon under the conditions you select in the Monitoring Preferences dialog box. Click the printer name and click Printer Status on the Printer menu to open the Current Status menu.
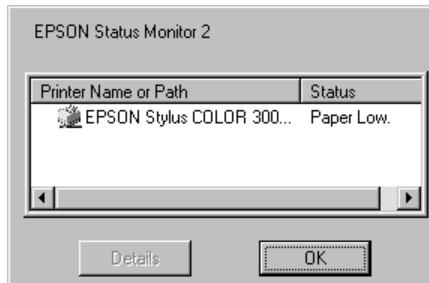
For details about the Current Status menu, see "Current Status menu" on page 12-21.

Stopping Monitoring

EPSON Status Monitor 2 automatically monitors the printer or printers you designate. To stop monitoring a printer, follow these steps:

1. Double-click the EPSON Status Monitor 2 icon at the bottom of your desktop or on the taskbar.

Windows 95/98/2000/NT 4.0   NT 3.51

Double-click   Double-click
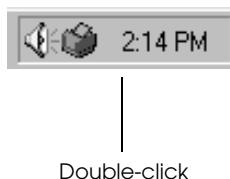
2. Click Settings, point to Background monitoring, and then click Stop monitoring now.
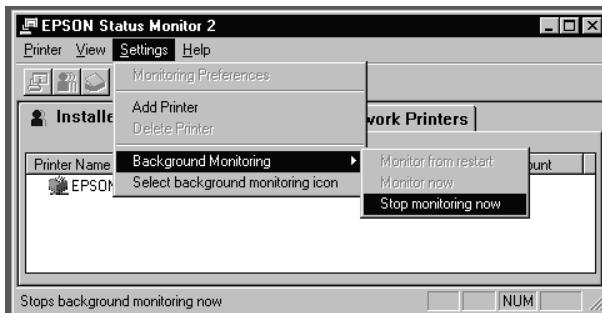
3. Click Printer and click Close.
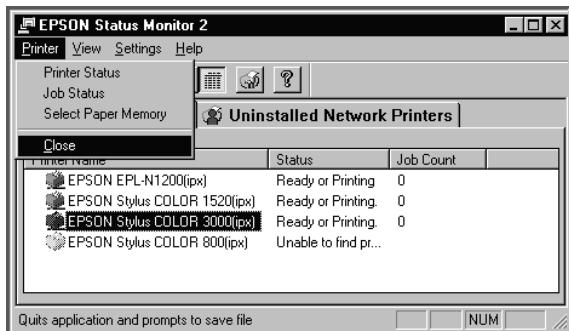
Note:
You can restart the Status Monitor by clicking Monitor from restart *or* Monitor now *on the Settings menu. If you stop monitoring and close EPSON Status Monitor 2, the background monitoring icon disappears from the taskbar of Windows 95/98/2000/NT 4.0, but the icon remains on the desktop in Windows NT 3.51. To restart the Status Monitor, see "Starting EPSON Status Monitor 2" on page 12-12.*

Uninstalling EPSON Status Monitor 2

You can remove EPSON Status Monitor 2 from your computer in the following manner:

> **Caution:**
> *Quit other programs such as virus check programs before removing EPSON Status Monitor 2.*

Note for Windows 2000, NT 4.0, and NT 3.51:
You need to log on as an Administrator.

### From Windows 98/95/2000/NT 4.0

1. Close EPSON Status Monitor 2 as described in "Stopping Monitoring" on page 12-28.

2. Click Start on the taskbar, point to Settings, and then click Control Panel.

3. Double-click Add/Remove Programs.

4. Click EPSON Status Monitor 2 and click the Add/Remove button (Windows 98/95/NT 4.0) or the Change/Remove button (Windows 2000).

5. Follow the instructions on the screen.

From Windows NT 3.51

1. Double-click Epson in the Program Manager.
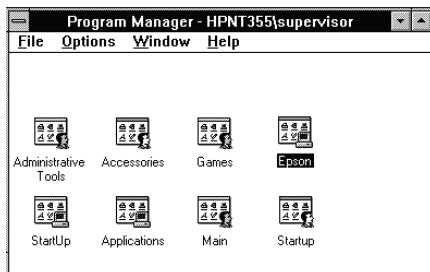
2. Double-click EPSON Status Monitor 2 Uninstall.
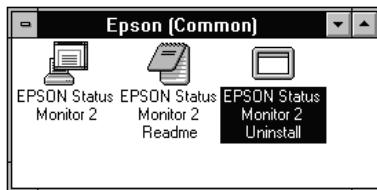
3. Follow the instructions on the screen.

Note for NT 4.0 & 3.51:
If you try to uninstall EPSON Status Monitor 2 when using IntranetWare Client for NT in Windows NT 3.51/4.0, the message "Could not complete Setup because EPSON Status Monitor 2 is running. Quit EPSON Status Monitor 2 and run Setup again" may appear, and the uninstall program may terminate. In this case, delete the following files from the directory where EPSON Status Monitor 2 is installed, and then delete EPSON Status Monitor 2. Deleting these files causes no errors in the operation of Novell IntranetWare Client for NT.

Files:
NETWIN16.DLL, CLNWIN16.DLL, LOCWIN16.DLL, NCPWIN16.DLL, NWIPXSPX.DLL, CLXWIN16.DLL, CALWIN16.DLL

Tips for Using EPSON Status Monitor 2

Controlling the packet traffic on the network

The computer with EPSON Status Monitor 2 communicates with the printer across the network. If there are many monitoring computers and printers to be monitored, packet traffic increases and may slow down the network. Limit the number of monitoring computers and printers to be monitored to control network traffic.

It is a good idea to designate a single printer administrator who can monitor all printers on the network and allow others to monitor only the printer that they usually use. This is one way to decrease network traffic.

The monitoring interval also affects the network traffic. Make the interval longer for printers at a great distance on the network.

Monitoring printers beyond routers

When you monitor NetWare printers located beyond dial-up routers in the wide area network, you are likely to be charged because of the line connection. Consider the network configuration and set hops carefully on NetWare networks.

If you set one or more hops for the NetWare network, the search packet travels beyond the router. Even if there are no printers to be monitored beyond dial-up routers, it is likely that the dial-up line will be used and you will be charged more than you expect. If you do not monitor printers beyond routers, set 0 for the number of hops during installation. To reset the number of hops, reinstall the Status Monitor. See "Installing EPSON Status Monitor 2" on page 12-7.

About uninstalled network printers

The Uninstalled Network Printers menu shows network printers that do not have drivers installed in your computer. Because you can monitor printers without installing printer drivers, this feature is useful for network printer administrators.

Chapter 13

EpsonNet Internet Print Utility

EpsonNet Internet Print is a utility program that supports printing across the Internet using Internet Printing Protocol (IPP). Since the network adapter supports IPP, Internet printing is possible using this utility. You can print or make printer settings from Windows 98, Windows 95, and Windows NT4.0 systems that can access the Internet. You can also print via a proxy server using this utility.

Before using the EpsonNet Internet Print utility, be sure to read the README file found in the EpsonNet Internet Print folder. This file contains the latest information on the EpsonNet Internet Print.

Note:
EPSON Status Monitor 2 is a utility program that monitors your printer and gives you information about its current status. Because this utility does not support IPP, printers connected to the Internet cannot be monitored with EPSON Status Monitor 2 (or EPSON Status Monitor 3). If you use EpsonNet Internet Print on a computer which has EPSON Status Monitor 3 installed, a communication error message may appear when you view printer properties. To avoid this, click the Optional Settings *tab in the target printer's properties dialog box and click the* Update the Printer Option Information Manually *radio button.*

Environment

Operating systems

❑ Windows 98, Windows 95, or Windows NT 4.0 Server and Workstation

❑ An Intel x86 series or compatible processor

Supported products

❑ EPSON print servers that support IPP (EpsonNet Internet Print comes with network adapters, printers, and interface cards that support IPP)

Installing EpsonNet Internet Print

Follow the steps below to install EpsonNet Internet Print.

1. Be sure that the TCP/IP protocol is installed in the computer and a valid IP address is set for the computer and printer.

2. Insert the Software CD-ROM included in the package in the CD-ROM drive.

3. The EPSON Installation Program screen opens automatically.

   If the EPSON Installation Program screen does not appear automatically, click Start and Run. Type D:\EPSETUP and click OK. (Substitute the appropriate letter for your CD-ROM drive as necessary.)

4. Double-click Install EpsonNet Internet Print; or install by selecting Install EpsonNet Internet Print and then clicking the arrow at the top right.

5. Follow the on-screen instructions to complete the installation.

6. Restart the computer after installation is complete.

Setting the Printer Using EpsonNet Internet Print

EpsonNet Internet Print supports printing across the Internet using Internet Printing Protocol. Follow the steps below to set up the printer.

Note:
Before following the steps below, you must make the appropriate IPP settings in EpsonNet WebAssist. See "IPP" on page 10-27 for instructions on setting up IPP. In the steps below, you will be asked for the IPP URL you set in the IPP setting screen in EpsonNet WebAssist.

Windows 98/95

1. Make sure that TCP/IP is correctly installed and setup in the computer and a valid IP address is set for the computer and printer.

2. Make sure that the IPP settings in EpsonNet WebAssist are correct. See "IPP" on page 10-27 for instructions on settings for IPP.

3. To start EpsonNet Internet Print, click Start, point to Programs and EpsonNet Internet Print, then click Add EpsonNet Internet Print Port.

4. The following screen appears. The address you set here becomes the port for Internet printing. Make the settings described below.
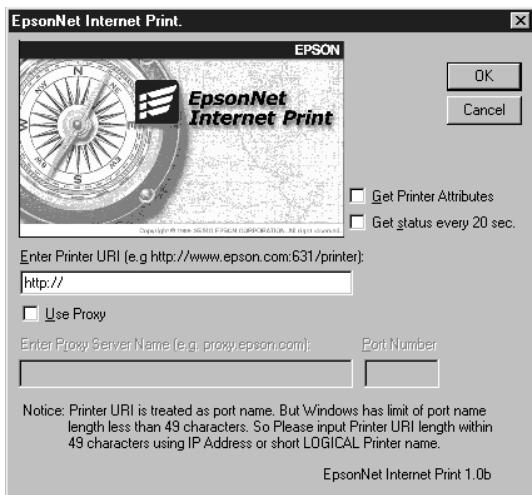
Enter Printer URI:
Enter the target printer's URI up to 49 characters. The URI you set here must be same as the IPP URL you have set for the IPP setting screen in EpsonNet WebAssist. Do not use the following characters; | \ [ ] { } < > # " `
Format: **http://**the IP address of the printer/the printer name
Example: **http://**192.168.100.201/EPSON_IPP_Printer

Use Proxy:
When using the proxy server, select this box and enter the Proxy Server Name and Port Number. All the communication is done via proxy server.

Enter Proxy Server Name:
Enter the proxy server name or the IP address of the proxy server. You can enter up to 256 characters, but available characters are up to 127 characters. Do not use the following characters; | \ [ ] { } < > # " `

Port Number:
Enter the port number of the proxy server (from 0 to 65535).

Get Printer Attributes:
When you select this box and click OK, EpsonNet Internet Print communicates with the printer and acquires information, so it may take a few minutes before a message appears. This setting is available only when creating a port.

Get status every 20 sec.:
Select this box when you want to receive printer status updates at regular intervals (every 5 seconds during printing and every 20 seconds when idle). If you select this box, a message will appear if an error occurs during printing. You can also check the printer status by double-clicking the printer icon.

OK button:
Saves the settings.

Cancel button:
Cancels any changes.

Note:
❏ *The settings you make above can be changed after settings the printer. In the printer Properties dialog box, click the* Details *tab, and click the* Port Settings *button to change the settings.*

❏ *Be aware that when connecting to the Internet using a dial-up router and selecting the* Get status every 20 sec *check box, you may be charged for the extra line connection.*

❏ *When you check the* Get Printer Attributes *check box and click* OK, *an error message might appear. Be sure that the printer power is on, and the printer is correctly connected on the network.*

❏ *If the printer power is off or there is a problem in the network, the* Get status every 20 sec *check box is automatically cleared. If this happens, make sure that the printer power is on and the printer is correctly connected on the network, and then check the* Get status every 20 sec *check box again.*

5. Click OK to save settings.

6. When a message appears saying the settings are correctly configured, click OK to start the Add Printer Wizard. Click Next.

   Note:
   If you click Cancel and then later want to add the printer, start the Add Printer Wizard and follow the steps below.

7. Click the Local printer radio button and click Next.

8. Select the printer driver and click Next.

   If the following dialog box appears, select Replace existing drive and click Next.

9. Select the port added by EpsonNet Internet Print in the previous section. Click Next.

10. Follow the on-screen instructions. If a dialog box instructing you to install EPSON Status Monitor 2 or EPSON Status Monitor 3 appears, click Cancel and terminate the installation.

Note:
❏ *If you delete the port which you set above from the* Details *tab of the printer properties, you cannot reuse the deleted port name as a new port name (the printer URI) until you restart the computer.*

❏ *If you are using EPSON Status Monitor 3 and printing with EpsonNet Internet Print, the message "A communication error has occurred." appears. You can get rid of this message by clearing the* Monitor the Printing Status *check box in the Utility menu of the printer properties.*

Windows NT 4.0

1. Be sure that TCP/IP is correctly installed and setup in the computer and a valid IP address is set for the computer and printer.

2. Be sure that the IPP settings in EpsonNet WebAssist are correctly set. See "IPP" on page 10-27 for instructions on setting up IPP.

3. Click Start, point to Settings, and then click Printers.

4. Double-click the Add Printer icon and click Next.

5. Click the My Computer radio button and click Next.

6. Click the Add Port button, and select EPSON IPP Port from the list. Then click the New Port button.
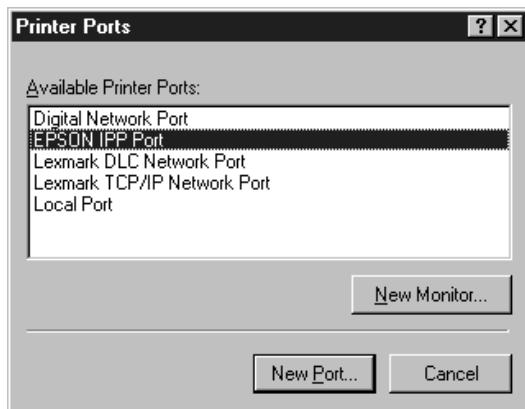
7. The following screen appears. The address you set here becomes the port for Internet printing. Make the settings described below.
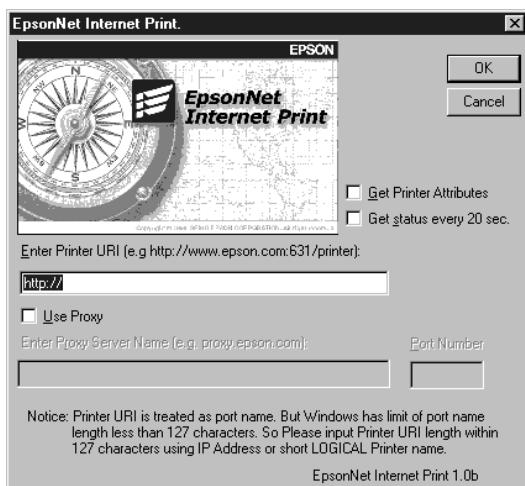
Enter Printer URI:
Enter the target printer's URI (up to 127 characters). The URI you set here must be the same as the IPP URL you set for the IPP configuration in EpsonNet WebAssist. Do not use the following characters; | \ [ ] { } < > # " `

Format: **http://** the IP address of the printer/the printer name
Example: **http://192.168.100.201/EPSON_IPP_Printer**

Use Proxy:
When using a proxy server, select this box and enter the Proxy Server Name and Port Number. All communication is done via the proxy server.

Enter Proxy Server Name:
Enter the proxy server name or the IP address of the proxy server (up to 256 characters). Do not use the following characters; | \ [ ] { } < > # " `

Port Number:
Enter the port number of the proxy server (from 0 to 65535).

Get Printer Attributes:
When you select this box and click OK, EpsonNet Internet Print communicates with the printer and acquires information, so it may take a few minutes before a message appears. This setting is available only when creating a port.

Get status every 20 sec.:
Select this box when you want to receive printer status updates at regular intervals (every 5 seconds during printing and every 20 seconds when idle). If you select this box, a message will appear if an error occurs during printing. You can also check the printer status by double-clicking the printer icon.

OK button:
Saves the settings.

Cancel button:
Cancels any changes.

Note:
❏ *The settings can be changed after setting up the printer. In the printer Properties dialog box, click the* Ports *tab, and click the* Configure Port *button to change the settings.*

❏ *Be aware that if you connect to the Internet using a dial-up router and select the* Get status every 20 sec *check box, you may be charged for the extra line connection.*

❏ *When you select the* Get Printer Attributes *check box and click* OK, *an error message may appear. Be sure that the printer power is on, and the printer is connected to the network.*

❏ *If the printer power is off or there is a problem in the network, the* Get status every 20 sec *check box is automatically cleared. If this happens, make sure that the printer power is on and the printer is correctly connected on the network, and then check the* Get status every 20 sec *check box again.*

8. Click OK to save the settings.

9. Select the printer driver, and follow the on-screen instructions to install the printer driver.

   If the dialog box leading you to install EPSON Status Monitor 2 or EPSON Status Monitor 3 appears, click Cancel and terminate the installation.

   Note:
   When you are using EPSON Status Monitor 3 and printing from EpsonNet Internet Print, the message "A communication error has occurred." appears. To clear this message, right-click the printer icon, select Document Defaults, *and select the* Utility *tab. Then check off the* Monitor the Printing Status *check box.*

Status Alert Window

The EpsonNet Internet Print utility updates the status of the IPP printer if you have selected the Get status every 20 sec. check box in the EpsonNet Internet Print dialog box.

The status alert window appears when the printer is out of paper, toner, or ink, if paper is jammed, the cover is open, or when the printer is offline.

The EpsonNet Internet Print utility checks the printer status every 5 seconds during printing and every 20 seconds when idle. If you do not want to check the printer status, clear the Get status every 20 sec. check box in the EpsonNet Internet Print dialog box.

Uninstalling EpsonNet Internet Print

Follow the steps below to uninstall EpsonNet Internet Print.

1. Click Start, point to Settings, and then click Control Panel.

2. Double-click the Add/Remove Programs icon.

3. Select EpsonNet Internet Print and click the Add/Remove button.

4. The message "Are you sure you want to completely remove 'EpsonNet Internet Print' and all of its components?" appears on the screen. Click Yes.

Chapter 14

Printer Status Page Utility

This section explains about the Printer Status Page utility and Internet Printing supported by Windows 2000. Printer Status Page is a set of customized web pages for Microsoft Windows 2000 Internet Printing. With this utility, you can monitor the printer status and network settings of an EPSON printer over the Internet.

Microsoft Internet Printing lets you print from Windows 2000 Server and Windows 2000 Professional clients to Windows 2000 print servers using a URL. You can search printers on your network, manage printers, and view the printer and print job status using a browser.

Printer Status Page is a utility that comes with EPSON printer drivers for Windows 2000. When you install the EPSON printer drivers for Windows 2000, Printer Status Page is also installed. The appearance of the screen in Printer Status Page differs depending on the printer you are monitoring.

Note:
Using the Printer Status Page utility requires the use of network privileges and detailed network knowledge. If you need assistance, contact your network administrator.

Environment

Server

❏ Windows 2000 Server and Windows 2000 Professional with Internet Information Service (IIS) Version 5.0 or higher

Client

❏ Windows 2000 Server and Windows 2000 Professional

❏ Internet Explorer version 4.01 or higher with Service Pack 2

❏ 256 color display or better

Interface cards

❏ C82362✽, C82363✽, and C82364✽ with software version 2.0 or higher

Network adapter

❏ C82378✽ parallel network adapter

Printers

❏ See the printer manual whether your printer supports Printer Status Page.

Setting Up Your Printer

This section explains the environmental requirements for Printer Status Page and how to set up the printer. The standard port monitor that comes with Windows 2000 connects a Windows 2000 print server to network-interface printers that use the TCP/IP protocol. You must install the Internet Protocol (TCP/IP) on the server and set the printer for TCP/IP. See "Windows 2000" on page A-3 to install TCP/IP.

The environmental requirements for Printer Status Page are;

Server and client

❏ Internet Information Service (IIS) is installed in Windows 2000. To check whether IIS is installed, double-click the Add/Remove Programs icon in the Control Panel, click the Add/Remove Windows Components button, and then click the Components button. In the Windows Components dialog box, make sure the Internet Information Service (IIS) is selected.

❏ Internet Explorer 4.01 or better installed.

❏ The computer is connected to the network and TCP/IP is correctly set.

Printer

You need to set up the printer that you want to manage with Printer Status Page.

1. Make sure the printer is connected to the network, and TCP/IP is correctly set for the printer.

2. Install the printer driver using the Add Printer wizard. When you install the EPSON printer driver for Windows 2000, Printer Status Page is also installed. See "Printing via Standard TCP/IP Port Monitor in Windows 2000" on page 6-2 and following notes to install a printer driver.

    Note:
    ❏ *Install printer drivers using the Add Printer wizard. Do not install using Setup.exe because the Printer Status Page is not installed in this way. The printer driver is included in the CD-ROM that comes with your printer.*

    ❏ *Use Standard TCP/IP Port Monitor for the port.*

    ❏ *When the Printer Sharing dialog box appears during installation, select* Share as.

    ❏ *If the printer driver for Windows 2000 is not included on the CD-ROM that comes with your printer, ask your EPSON dealer.*

Managing Printers from a Browser

This section explains how to manage printers from a browser.

Accessing the Print Server Page

To access the Print Server Page, which contains a list of all the printers on the server, type one of the following:

❑ **http://***the host name (DNS name) of the server***/printers**

❑ **http://***the computer name (WINS name) of the server***/printers**

❑ **http://***the IP address of the server***/printers**

Example: **http://hv100/printers**

The following page appears, providing the information listed below.

Items	Explanation
Name	Print queue name of the shared printer. By clicking the print queue name, you can access Print Queue Page.
Status	Status of the print queue.
Location	The location specified when adding the printer.
Jobs	Number of jobs currently in the print queue.
Models	Model name of the printer.
Comment	Comments specified when adding the printer.

Print Queue Page

When you click the printer name in Print Server Page, the following page appears. You can manage printing from the menu on the left. For information on these menus, see the Windows 2000 online help. Click "Device Status" to display the Printer Status Page.
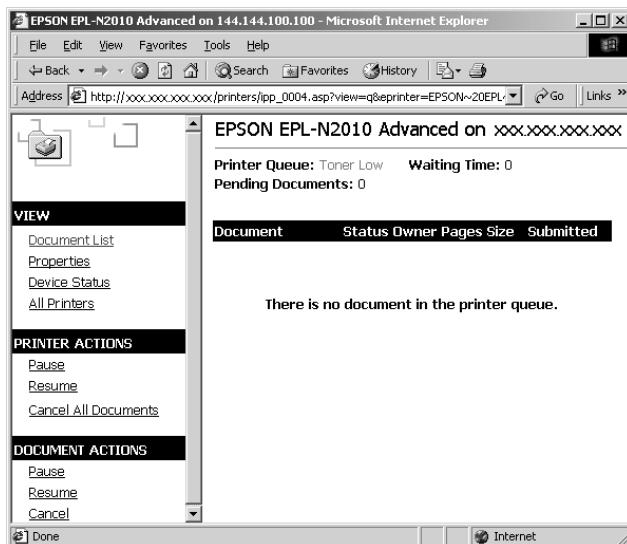
Printer Status Page

To access Printer Status Page, do either one of the following;

❏ Click the "Device Status" link in the Print Queue Page.

❏ Select the target printer from the Windows 2000 Printer folder, and click the "Get More Info" link.

Note:
The appearance of the screen and the items listed below differ depending on your printer.
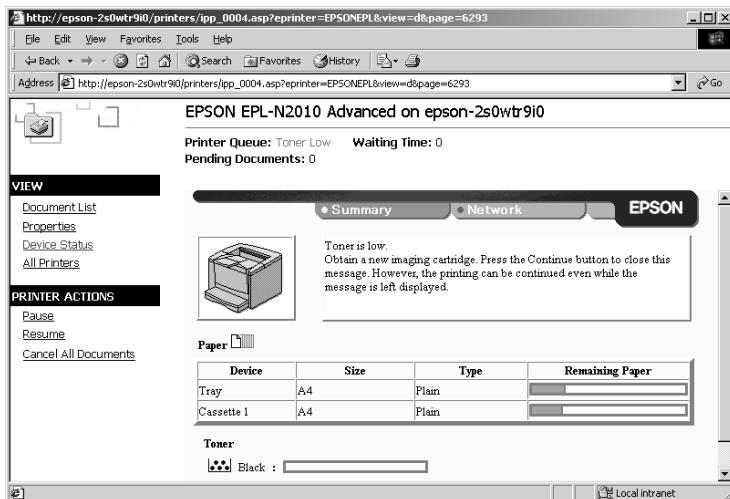
Items	Explanation
Printer image	Displays the current printer status image.
Status message	Displays the current printer status information.
Summary	Displays the consumable (toner, ink, etc.) and paper remaining information.
Network	Displays the printer's network information.

Summary menu

The Summary menu contains consumable and paper information.

Ink Jet printer

Items	Explanation
Paper	
Device	Name of the paper feeder.
Size	Size of the paper loaded in the paper feeder.
Type	Type of paper loaded in the paper feeder.
Remaining Paper	The remaining paper is indicated by a green bar. If the paper source is a cassette, the bar turns red as the paper runs out. If the paper source is a tray, the bar does not turn red.
Ink	
Black	The amount of remaining black ink is displayed. A caution icon appears as the black ink level gets low, and an error icon appears when the ink runs out.
Color	The amount of remaining color ink is displayed. A caution icon appears as the color ink level gets low, and an error icon is appears when the color ink runs out.

Page printer

Items	Explanation
Paper	
Device	Name of the paper source.
Size	Size of the paper loaded in the paper source.
Type	Type of paper loaded in the paper source.
Remaining Paper	The remaining paper is indicated by a green bar. If the paper source is a cassette, the bar turns red as the paper runs out. If the paper source is a tray, the bar does not turn red.
Toner	The remaining toner is indicated by a green bar. As the toner level gets low, the toner icon blinks. For color printers, the amount of color toner remaining is also indicated.
Photoconductor Unit Life	If the photoconductor is separate from the toner cartridge, a service life bar appears. This does not appear when the photoconductor is connected to the toner cartridge.
Fuser Oil Roll	Indicates the remaining service life of the oil roll. Appears on color printers only.
Waste Toner Collector	Indicates amount of waste toner. Appears on color printers only.

Network menu

The Network menu contains following information. Click the appropriate tab to see the settings you want.

Items	Explanation
Ethernet	Displays the print server's information such as model name, hardware and software version of the print server, and physical layer type of the interface.
NetWare	Displays the NetWare settings of the print server.
AppleTalk	Displays the AppleTalk settings of the print server.
TCP/IP	Displays the TCP/IP settings of the print server.
NetBEUI	Displays the NetBEUI settings of the print server.
SNMP	Displays the SNMP settings of the print server.

Chapter 15

Troubleshooting

General Problems

Cannot configure the network adapter or cannot print from the network.	
Cause	**What to do**
Printer settings or network settings may be wrong.	First, check if you can print a status sheet by pressing the status sheet button, as described in Chapter 1.
	If not, set the interface mode of the printer's control panel to Auto or Option. If you can print a status sheet, check the network settings.

Unable to start EpsonNet WinAssist.	
Cause	**What to do**
You have added or deleted protocols after installing EpsonNet WinAssist.	Uninstall EpsonNet WinAssist and reinstall it.

The message "TCP/IP cannot be used." appears when you start EpsonNet WinAssist.

Cause	What to do
TCP/IP is not installed in the computer.	Install TCP/IP protocol.
The computer's IP address is not set correctly.	Set the IP address for the computer.
There is no DHCP server, but DHCP is selected for the Get IP address setting.	Install a DHCP server, or change the Get IP address settings in TCP/IP menu.

The message "Could not complete communicating configuration data" appears when you send settings to the network adapter.

Cause	What to do
This might happen when using a dial-up router.	Run Command Prompt from the computer in which EpsonNet WinAssist/MacAssist is installed, then enter the following command;
	Format: >ROUTE_ADD_the IP address of the network adapter_ the IP address of the computer (the under bar represents one space)
	Example: >ROUTE ADD 192.168.192.168 22.33.44.55.

Unable to make settings using EpsonNet WebAssist.	
Cause	**What to do**
You haven't set the IP address for the network adapter.	Set the IP address for the network adapter using EpsonNet WinAssist, MacAssist, or the ping command, as described in Chapter 3. You can check the IP address on a status sheet.

Unable to set the IP address using the arp/ping commands.	
Cause	**What to do**
The network cable may be disconnected.	Connect the network cable. Also, check the network environment.
The address of the router is set as the default gateway.	Set the IP address of your computer for the default gateway temporarily. After setting the IP address, return the IP address to the original value.

The Printer Model and IP Address do not appear in the EpsonNet WinAssist dialog box.	
Cause	**What to do**
If the IP address is set to the default IP address, the items above might not appear.	Set a valid IP address.
	Refresh the status. To do this, select Refresh from the View menu.
	Increase the length of time before a time-out. To do this, select Timeout from the Tool menu. Please note that doing so can cause EpsonNet WinAssist to run more slowly.

An extra account is generated when using the dial-up network.	
Cause	**What to do**
NetWare is set to Enable even though you are not using the NetWare.	Set NetWare to Disable in the NetWare screen of the EpsonNet WebAssist.

How to acquire an IP address.
In order to acquire your IP address, you need to apply with the NIC (Network Information Center) in your country. You may need to ask your system administrator for more information.

Problems Specific to Your Network Environment

NetWare environment

Nothing prints even though clients have sent data to the printer.	
Cause	**What to do**
Clients may not be registered, or the network adapter may not be logged in to the NetWare server.	Make sure clients are registered as users of the print queue and the print server. Also, make sure the network adapter is logged in to the NetWare server. If you need more information about Print Server mode or Remote Printer mode, see Chapter 4 or your NetWare manual.

EpsonNet WinAssist will not start.	
Cause	**What to do**
Microsoft NetWare Directory Service is installed in your computer.	If you are using NDS service, use Novell NetWare Client32.

It takes a long time to start EpsonNet WinAssist.	
Cause	**What to do**
Novell Client service is installed.	Double-click Network in the Control Panel, then double-click the appropriate network adapter. Clear the items related to IPX to unbind IPX.

The printers do not appear in the EpsonNet WinAssist dialog box.	
Cause	**What to do**
The printer is turned off.	Turn on the printer.
The printer is not in the same segment as the computer where you installed EpsonNet WinAssist.	To search for network adapters in other segments, use the Search Options of EpsonNet WinAssist.
Ethernet frame type bound with NetWare server's IPX does not match with the Ethernet frame type set for the network adapter.	Set the same Ethernet frame type for the network adapter.

Macintosh environment

Printers do not appear in the Chooser.	
Cause	**What to do**
EtherTalk is not selected in the Network or AppleTalk Control Panel.	❑ For models without Open Transport: Make sure to select EtherTalk in the Network Control Panel.
	❑ For models with Open Transport: Make sure to select Ethernet in the AppleTalk Control Panel, and make sure AppleTalk is active in the Chooser. Also, check the network equipment including the hub cable.

Windows 98/95 environment

You cannot open the file and cannot print when using Stylus printers from Windows 98/95.	
Cause	**What to do**
Print Manager is not on.	On the EPSON Spool Manager's Queue Setup dialog, select Spool to local printer and then select the Use Print Manager for this port check box.

Cannot print correctly in NDS Print Server mode or NDS Remote Printer mode under Windows 98/95.	
Cause	**What to do**
You may not be able to print correctly under the following conditions: ❑ When using an NDS queue in Windows 95 (version OSR 2.1, with USB support)	Open the target printer's properties dialog box. Click Capture Printer Port in the Details menu. Set LPT port for the Device name and \\(server name)\(print queue name) for the Path name, then click OK.

A dial-up connection dialog box appears when printing with TCP/IP via EpsonNet Direct Print.	
Cause	**What to do**
You have selected a phone line or modem (for Internet Explorer 4.0x) for the Internet connection.	Printing will complete normally after you cancel this dialog box, but the message appears every time you print until you change this setting.

Windows NT environment

Clients cannot print with TCP/IP via Windows NT Server 3.51 (NTFS).	
Cause	**What to do**
You have not changed the type of access.	You need to change the type of access in the \\WINNT35\system32\ spool\PRINTERS directory of the NT Server. See "Change the type of access of the spool directory" on page 6-8.

No clients except an administrator can print via Windows NT Server 4.0/3.51.	
Cause	**What to do**
CREATOR OWNER has been deleted from the Printer Permissions list, or CREATOR OWNER is set to Print or No Access.	Add CREATOR OWNER by clicking the Add button on the Printer Permissions dialog box, or set CREATOR OWNER to Manage Documents (default setting).

A dial-up connection dialog box appears when printing with TCP/IP via EpsonNet Direct Print.	
Cause	**What to do**
You have selected a phone line or modem (for Internet Explorer 4.0x) for the Internet connection.	Printing will complete normally after you cancel this dialog box, but the message appears every time you print until you change this setting.

Problems Using EPSON Status Monitor 2

The Current Status menu shows "A communication error has occurred."	
Cause	**What to do**
The printer is turned off.	Make sure that the power cord is properly plugged into the electrical outlet. Turn on the printer.
The printer is running a self-test or initializing.	Turn off the printer to terminate the self-test, and then turn it on again, or allow the printer enough time to finish initialization.
Multiple computers are monitoring a single printer, and the printer cannot reply to all of them at the same time.	Decrease the number of monitoring computers or make the monitoring interval longer in the Monitoring Preferences dialog box. See "Setting monitoring preferences" on page 12-25 and "Tips for Using EPSON Status Monitor 2" on page 12-32.
The printer is not ready to print.	Make sure the printer is ready to print. For details, see your printer guide.

An application error occurs, and NetWare printers cannot be monitored when Allow monitoring is selected for monitoring Windows shared printers under Windows NT 4.0.	
Cause	**What to do**
There is a known bug in the operating system.	Install Service Pack 2 or higher before monitoring Windows shared printers under Windows NT 4.0.

NetWare printers cannot be monitored when Allow monitoring is selected for monitoring Windows shared printers under Windows NT 4.0/3.51.

Cause	What to do
EPSON Status Monitor 2 is set incorrectly.	Double-click Services in the Control Panel and stop the EPSON Printer Status Agent service. Restart EPSON Status Monitor 2 and then restart the service. This procedure must be repeated every time you log on to Windows NT 4.0/3.51.

NetWare printers cannot be monitored.

Cause	What to do
You are using EpsonNet WinAssist.	You cannot use EPSON Status Monitor 2 and EpsonNet WinAssist at the same time. Quit WinAssist and use EPSON Status Monitor 2. If you want to use WinAssist, quit EPSON Status Monitor 2 first.
The printer port number is not set to 0 when using Remote Printer mode.	Use the NetWare control tool to set the port number to 0.

NetWare print servers cannot be monitored beyond routers.

Cause	What to do
The number of hops is set to 0.	Change the number of hops according to "Making Status Monitor Settings" on page 12-11. See also "Tips for Using EPSON Status Monitor 2" on page 12-32.

NDS printers cannot be monitored.

Cause	What to do
You are not using a Novell Client.	If you are using Windows NT, use Novell IntranetWare Client. If you are using Windows 95, use Novell IntranetWare Client 32 Ver1.12 or later. If you are using Windows 98, use the latest Novell Client.

An existing printer cannot be found in Windows NT 3.51.

Cause	What to do
You may have logged on to the network before network modules were completely loaded.	Log on again. To clear this problem immediately after the operating system starts, log on after access to the hard disk drive is completed.

The status information does not match the real status of the printer.

Cause	What to do
EPSON Status Monitor 2 monitors the printer at intervals set in the Monitoring Preferences dialog box. A long interval may result in incorrect information.	Click Refresh on the View menu to update the information.

Decrease the monitoring interval in the Monitoring Preferences dialog box if you find that the Status Monitor often displays data that is outdated.

Wait until EPSON Status Monitor 2 monitors the printer again. |

Windows shared printers cannot be monitored.

Cause	What to do
You must make settings in EPSON Status Monitor 2 to monitor Windows shared printers.	Right-click Network Neighborhood and then click Properties. Verify that File and printer sharing for Microsoft Networks is shown in the list of installed components.

Verify that EPSON Status Monitor 2 is installed in the machine hosting the Windows shared printer, and be sure that the Windows shared printer is set for monitoring. |

Appendix A

Installing Protocols

Installing TCP/IP Protocols on Your PC

This sections explains how to install the TCP/IP protocol in all supported operating systems.

Note:
The network administrator must confirm any changes made to the IP address settings.

Windows 98/95

1. Click Start, point to Settings, and then click Control Panel.

2. Double-click the Network icon, and check if TCP/IP is in the list of installed network components on the Configuration menu.
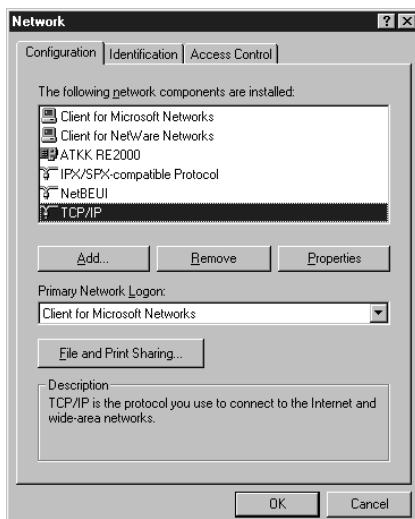
3.   If TCP/IP is not in the list, click Add.

4.   Select Protocol and click Add.
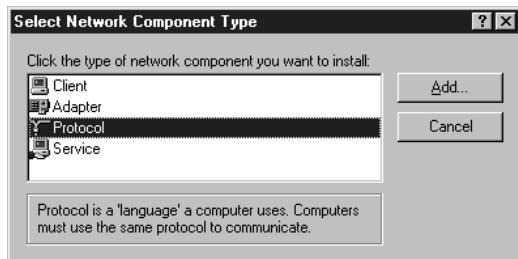
5.   Select Microsoft from the Manufacturers list and TCP/IP from
     the Network protocols list. Then click OK.
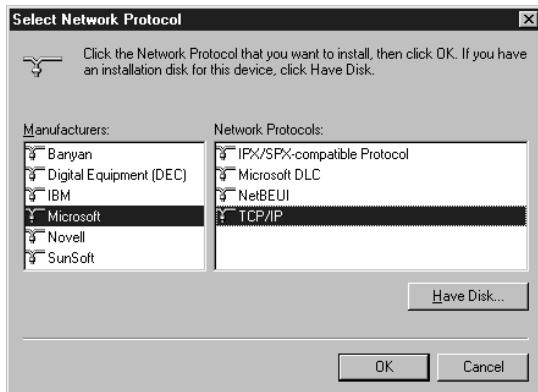
6.   Double-click TCP/IP on the Configuration menu to open the
     TCP/IP Properties dialog box. Make necessary settings such
     as the IP address.

Windows 2000

1. Click Start, point to Settings, and then click Network and Dial-up Connections. The Network and Dial-up Connections screen appears.

2. Right-click the desired network connection and then click Properties.

3. If Internet Protocol (TCP/IP) is not in the list of installed components, click Install.
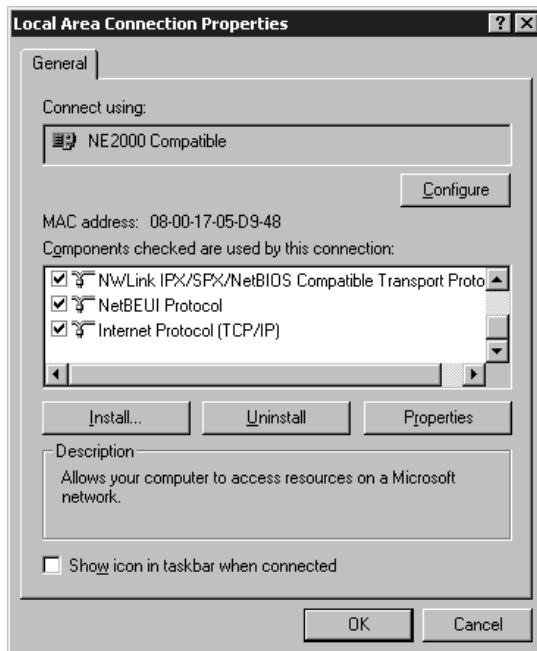
4. Click Protocol, and then click Add.
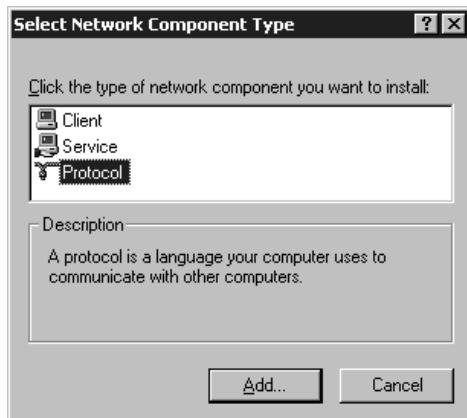
5. In the Select Network Protocol dialog box, click Internet Protocol (TCP/IP), and then click OK.
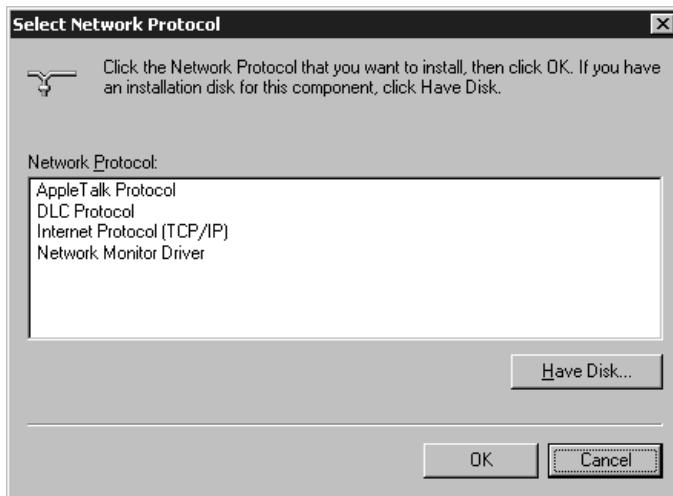
6. Verify that the Internet Protocol (TCP/IP) check box is selected. Then double-click Internet Protocol (TCP/IP) and set the IP address, subnet mask, etc. correctly.

Windows NT 4.0

1. Click Start, point to Settings, and then click Control Panel.

2. Double-click the Network icon in the Control Panel.

3. Click the Protocols tab to check if the TCP/IP Protocol is installed. If not, click Add and select TCP/IP Protocol. Follow the on-screen instructions.
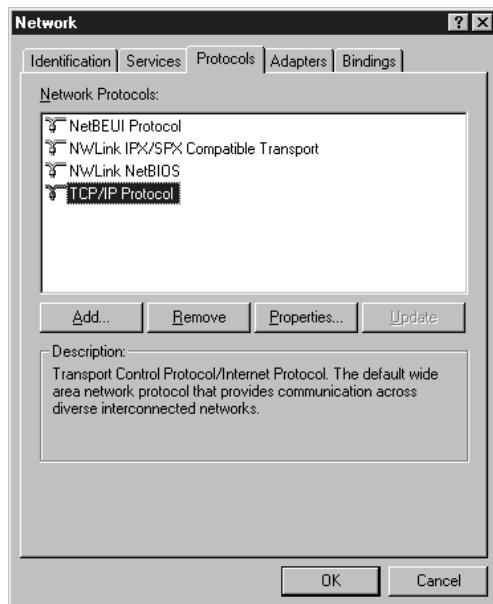
4. Click the Services tab make sure Microsoft TCP/IP Printing is listed. If it is not, click Add and select Microsoft TCP/IP Printing. Follow the on-screen instructions.
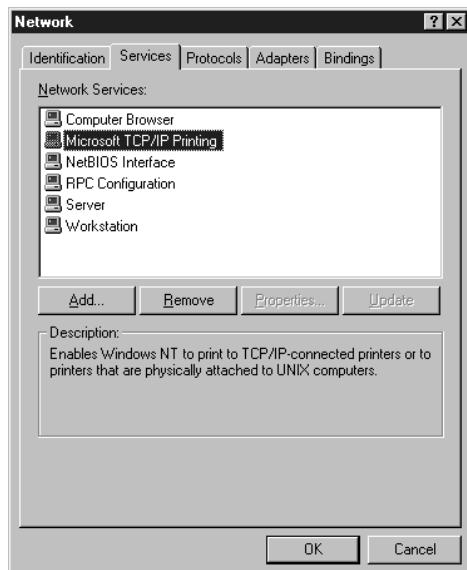
5. To continue installing the TCP/IP protocol, set the IP address when the Microsoft TCP/IP Properties dialog box appears.

    Notes:
    To check which IP addresses have already been assigned, click the Protocols *tab in the Network dialog box, select* TCP/IP Protocol, *and then click the* Properties *button.*

6. When the installation is complete, confirm items such as the IP address to make sure they have been entered correctly.

Windows NT 3.51

1. Double-click the Network icon in the Control Panel.

2. If Microsoft TCP/IP Printing is not listed, click Add Software.
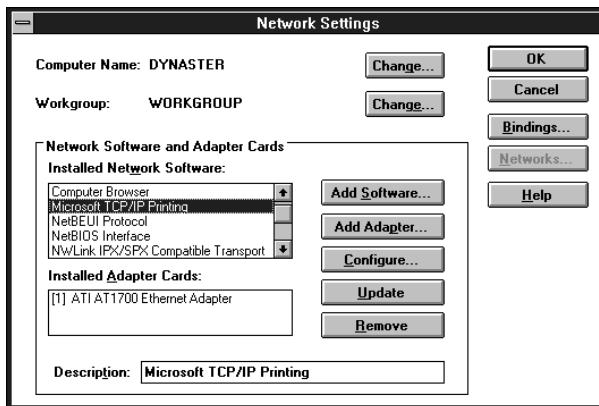
3. Select TCP/IP Protocol and related components and click Continue.
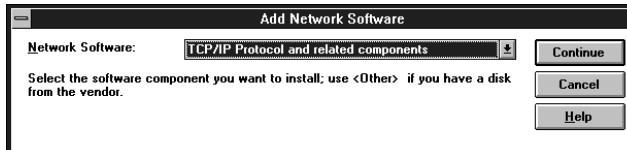
4. Select the Connectivity Utilities and TCP/IP Network Printing Support check boxes and click Continue.
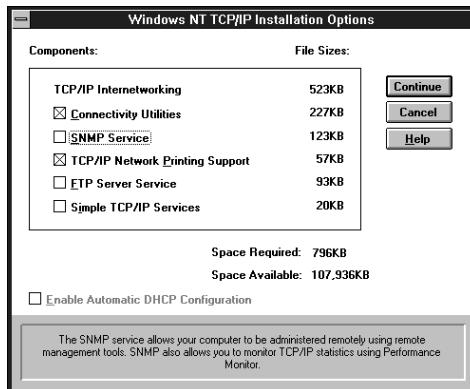
5. When the TCP/IP Configuration dialog box appears, set the IP address.
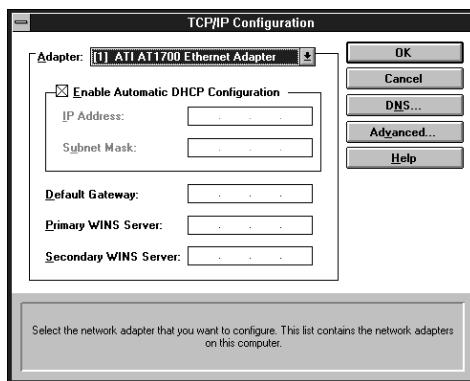
Note:
To check which IP addresses have already been assigned, select TCP/IP Protocol *in the Network Settings dialog box. Click the* Configure *button to open the TCP/IP Configuration dialog box.*

6. When installation is complete, confirm items such as the IP address to make sure they have been entered correctly.

Macintosh (with Open Transport)

Follow the steps below to set or check the IP address.

1. Double-click the AppleTalk Control Panel, and check that Ethernet is selected.

2. Double-click the TCP/IP Control Panel.

3. Set the IP address and other necessary settings.

Macintosh (without Open Transport)

Follow the steps below to set or check the IP address.

1. Double-click the Network Control Panel, and select EtherTalk.

2. Double-click the MacTCP Control Panel, and check whether an IP address has been set.

3. If the IP address has not been set, click the Details button and make the necessary settings. Then, set the IP address in the MacTCP dialog box.

Installing the NetBEUI Protocol

This sections explains how to install the NetBEUI protocol in all supported operating systems. To print with NetBEUI from Windows 98/95/2000, NetBEUI protocol and Client for Microsoft Networks must be installed; and to print with NetBEUI from Windows NT 4.0/3.51, NetBEUI protocol and Workstation must be installed on your computer.

Windows 98/95

1. Installing Client for Microsoft Networks.

   Double-click Network in Control Panels, and check that Client for Microsoft Networks is in the list of installed network components on the configuration menu.

2. If Client for Microsoft Networks is not in the list, click the Add button. Select Client and click Add.

3. Select Microsoft from the Manufacturers list and Client for Microsoft Networks from the Network Clients list and click OK.

4. Installing NetBEUI.

   Double-click Network in Control Panels, and check if NetBEUI is in the list of installed network components on the configuration menu.

5. If NetBEUI is not on the list, click Add. Select Protocol and click Add.

6. In the Select Network Protocol dialog box, select Microsoft from the Manufacturers list, and then select NetBEUI from the Network Protocols list and click OK.

Windows 2000

1. Click Start, point to Settings, and then click Network and Dial-up Connections. The Network and Dial-up Connections screen appears.

2. Right-click the network connection for which you want to install and enable NetBEUI, and then click Properties.

3. If NetBEUI Protocol is not in the list of installed components, click Install.

   Note:
   Also check that Client for Microsoft Networks *is installed.*
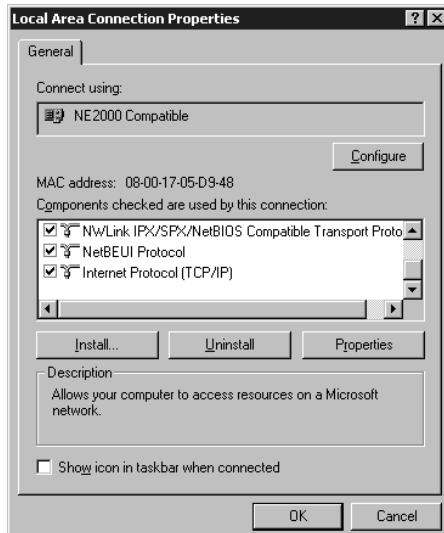
4. Click Protocol, and then click Add.

5. In the Select Network Protocol dialog box, click NetBEUI Protocol, and then click OK.

6. Verify that the NetBEUI check box is selected, and then click OK.

Windows NT 4.0

1. Double-click the Network icon in Control Panel. Click the Protocols tab, and check that the NetBEUI Protocol is in the Network Protocols list.
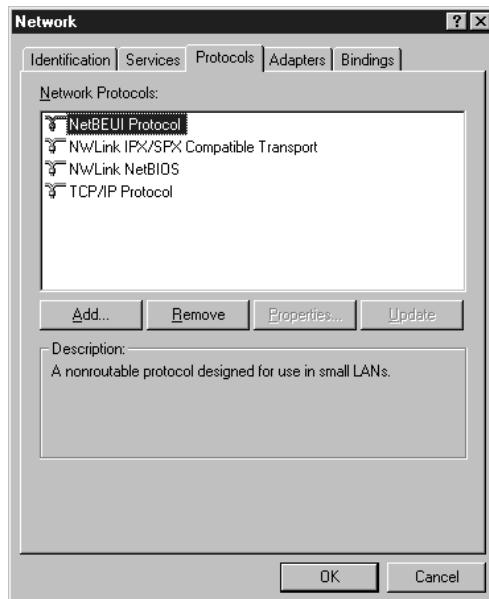
2. If NetBEUI Protocol is not in the list, click Add.

3. Select NetBEUI Protocol and click OK.

Windows NT 3.51

Note:
Be sure that Workstation *is in the Installed Network Software list.*

1. Double-click the Network icon in Control Panels to display the Network Settings dialog box. Make sure that the NetBEUI Protocol is in the Installed Network Software list.
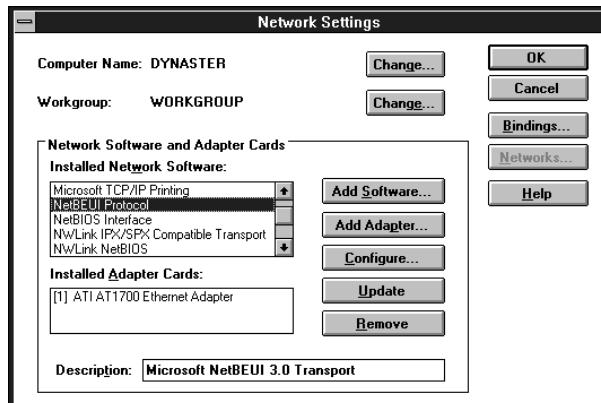
2. If NetBEUI Protocol is not in the list, click Add Software. Select NetBEUI Protocol from the Network Software pull-down menu, and click Continue to add NetBEUI.
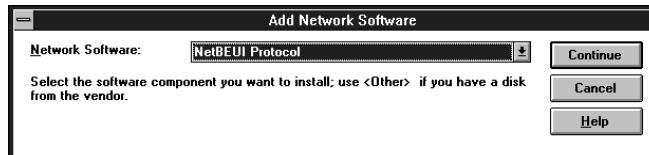
Appendix B

Uninstalling EpsonNet WinAssist

Follow the steps below to uninstall EpsonNet WinAssist.

Windows 98/95/2000/NT 4.0

1. Click Start, point to Settings, and then click Control Panel.

2. Double-click the Add/Remove Programs icon.

3. Select EpsonNet WinAssist and click the Add/Remove button (Windows 98/95/NT 4.0) or the Change/Remove button (Windows 2000).

4. The message "Are you sure you want to completely remove 'EpsonNet WinAssist' and all of its components?" appears on the screen. Click Yes.

Windows NT3.51

1. Double-click the Uninstall icon in the EpsonNet WinAssist window.

2. The message "Are you sure you want to completely remove the selected application and all of its components?" appears on the screen. Click Yes.

3. The message "Uninstall successfully completed" appears on the screen. Click OK.

Appendix C
Specifications

Environmental

Operating temperature:	5° to 35° C (41° to 95° F)
Storage temperature:	-30° to 70° C (-22° to 158° F)
Operating humidity:	20% to 80% RH
Storage humidity:	5% to 95% RH
Operating Vibration:	0.4 G (5 Hz to 55 Hz)
Storage Vibration:	1 G (5 Hz to 55 Hz)
Shock:	4 G

Network Software

NetWare 3.1x, 4.1x, or 5

EtherTalk (AppleTalk)

TCP/IP

NetBEUI

IPP

Interface Specifications

Parallel interface

The network adapter supports bi-direction (Nibble and ECP) parallel port.

DC and AC characteristics: IEEE 1284

Network interface

The network adapter supports both 10 Base-T and 100 Base-TX.

Connectors:
RJ-45 (ISO/IEC8802-3 12.6 MDI Specification)

DC and AC characteristics:
ISO/IEC 8802-3 12.5.3 Signal Characteristics

Regulatory Approvals

EMC: FCC part 15 subpart B Class B
CSA C108.8 Class B
CISPR Pub.22 Class B

CE Mark:

   EMC Directive 89/336/EEC

     EN 55022 Class B
         EN 50082-1
      IEC 60801-2
      IEC 60801-3
      IEC 60801-4

  AS/NZS 3548 Class B

Reliability

MTBF: 10,000 hours (power on, 100% duty)

MTTR: N/A (Replacement)

Regulatory Approvals for AC Adapter

Safety standards: UL1950
CSA C22.2 No.950
IEC 950
GS Mark
EN60950
AS/NZS3260

EMC: FCC part 15 subpart B Class B

EN 55022 Class B
EN 61000-3-2
EN 61000-3-3
EN 50082-1
  IEC 60801-2
  IEC 60801-3
  IEC 60801-4

AS/NZS 3548 Class B

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